

## Alan Leo Primary Directions

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*Part IV Primary Directions*

in

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by

Alan Leo

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The original Formulae relied on logarithms

they have been updated

for easy use with calculators and spreadsheets

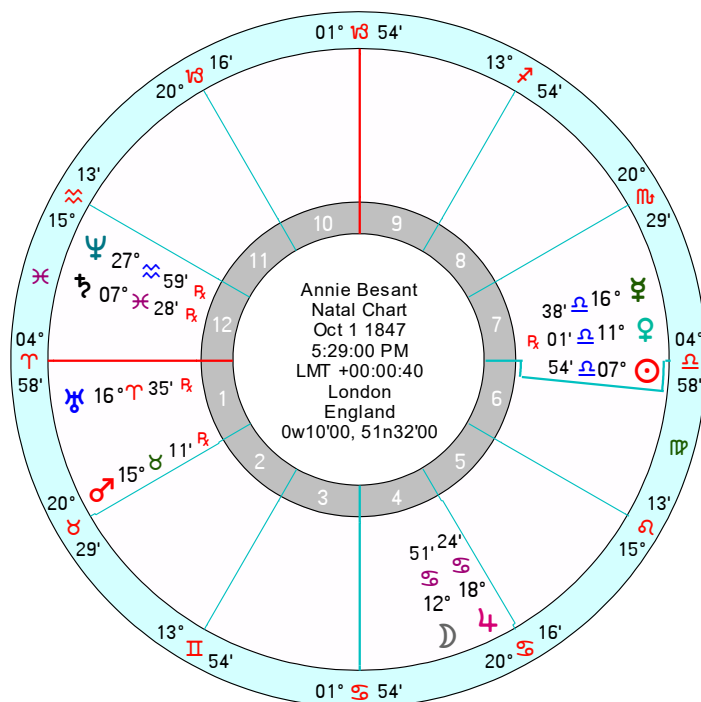
## **Alan Leo Primary Directions**

### **PART IV**

#### **PRIMARY DIRECTIONS**

# Alan Leo Primary Directions

## EXAMPLE HOROSCOPE



*R.A.M.C. 18h 8m 17s or 272° 4' <sup>1</sup>*

*R.A.I.C. 92° 4'*

MRS. ANNIE BESANT

*Born 1/10/1847, 5.29 p.m. London.*

<sup>1</sup> The example chart was cast using Janus 4.3 and the RAMC and Latitude (51N32) given in the text. There are minor differences to the chart in the text, the main one being the Ascendant which is given as 5 ♀ 3.

## PRELIMINARY NOTE TO PRIMARY DIRECTIONS

THE reader to whom the subject of what are called Primary directions is quite new should, before proceeding, turn back to Part I, Chapter VI, on the *Progression of the Horoscope*, and see that he understands the difference between the two different methods of progression. The method of the Progressed Horoscope, which includes Secondary Directions, is based mainly on the orbital revolution of the earth and the apparent orbital movements of the Sun, Moon, and planets. The method of Primary Directions, now to be described, is based mainly on the earth's axial rotation whereby the heavenly bodies are made to rise, culminate, and set.

Because of this difference between the two systems, different rules and methods of calculation have to be adopted. The computation of the directions now to be described is a much more onerous task than any that has gone before, and every beginner who undertakes the subject complains at first of the difficulties that surround it. This cannot be wholly avoided, although those who have a fair acquaintance with mathematics and with elementary astronomy will have an advantage over those who have less.

The chapters that follow have been arranged so as to present the simplest part of the subject first. After glancing through the Trigonometrical Formulae, the reader should study carefully the calculation of the Speculum, should apply it practically to his own horoscope or to any other that interests him, and should not pass on until he understands that chapter and is fairly familiar with its subject matter. Any error or misconception introduced at this point will be liable to invalidate all subsequent calculations.

Several examples of each kind of direction are given to simplify the matter; and it will soon be realised that the real objections to Primary directions are not their difficulty (for this is not serious when once the method is understood) but, in the first place, the length of time occupied by the calculations, which is considerable; and, in the second place, the marked differences of opinion that have always existed and that still exist with regard to many points.

## Alan Leo Primary Directions

### SPECULUM FOR MRS. BESANT'S HOROSCOPE

	<i>Latitude</i>	<i>Declination</i>	<i>R.A.</i>	<i>M.D.</i>	<i>S.A.</i>	<i>Cusp. Dist.</i>
☉	0° 00'	3 S 8	187° 15'	84° 49' D 95° 11' N	86° 03' D 93° 57' N	1° 14' above 7th
☿	5 S 17	17 N 55	103° 27'	11° 23' N 168° 37' D	66° 30' N 113° 30' D	11° 23' W. of 4th
☿	0 N 22	6 S 12	195° 30'	76° 37' D 103° 26' N	82° 08' D 97° 52' N	5° 34' above 7th
♀	8 S 14	11 S 56	186° 54'	94° 50' N 85° 10' D	105° 26' N 74° 34' D	10° 36' below 7th
♂	2 S 35	13 N 57	43° 30'	48° 34' N 131° 26' D	71° 47' N 108° 13' D	0° 43' above 2nd
♂	0 S 5	22 N 10	109° 59'	17° 55' N 162° 05' D	59° 09' N 120° 51' D	1° 48' E. of 5th
♂	2 S 2	10 S 40	339° 57'	67° 53' D 112° 07' N	76° 17' D 103° 43' N	17° 02' below 12th
♂	0 S 41	5 N 55	15° 34'	76° 30' N 103° 30' D	82° 30' N 97° 30' D	6° 0' below 1st
♂	0 S 34	12 S 44	330° 23'	58° 19' D 121° 41' N	73° 29' D 106° 31' N	9° 20' below 12th
M.C.		23 S 26 ½	272° 04'			Meridian
I.C.		23 N 26 ½	92° 04'			Meridian
Asc.		2 N 1	4° 38'			Horizon

Latitude 51° 32'

#### NOTE ON THE SPECULUM

It is usual to insert in the Speculum only one Meridian Distance and one Semi-arc for each heavenly body. If the body is above the horizon by mundane position, its distance from the upper meridian and its diurnal Semi-arc are inserted. If the body is below the horizon by mundane position, its distance from the lower meridian and its nocturnal Semi-arc are inserted. In the Speculum here given, both nocturnal and diurnal Meridian Distances and Semi-arcs are included for convenience of reference in calculating directions in subsequent pages. They are distinguished by the letters D (from diurnal S.A. and distance from upper meridian) and N (for nocturnal S.A. and distance from lower meridian).

## CHAPTER XX

### TRIGONOMETRICAL FORMULAE AND TABLES

THE following formulae are required either for casting the horoscope, for calculating the Speculum, or for computing Primary Directions. They are gathered together here in one Chapter for convenience of reference. Their use will be explained and fully illustrated in subsequent Chapters.

#### FORMULA I

*To convert Longitude into Right Ascension, without Latitude*

$$RA = \text{atan}(\tan(\text{longitude}) \times \cos(\text{obliquity of ecliptic}))$$

*If longitude between 90° and 270°, add 180° to RA*

*If longitude between 270° and 360°, add 360° to RA*

#### FORMULA II

*To convert Right Ascension into Longitude, without Latitude*

$$\text{Longitude} = \text{atan}(\tan(RA) / \cos(\text{obliquity of ecliptic}))$$

*If RA between 90° and 270°, add 180° to Longitude*

*If RA between 270° and 360°, add 360° to Longitude*

#### FORMULA III

*Longitude being given, to find Declination, without Latitude*

$$\text{Declination} = \text{asin}(\sin(\text{longitude}) \times \sin(\text{obliquity of ecliptic}))$$

#### FORMULA IV

*Declination being given, to find Longitude, without Latitude*

*If measured from ☊ or ☋*

$$\text{Longitude} = \text{acos}(\sin(\text{declination}) / \sin(\text{obliquity of ecliptic}))$$

*If measured from ☉ or ☌*

$$\text{Longitude} = \text{asin}(\sin(\text{declination}) \times \sin(\text{obliquity of ecliptic}))$$

## Alan Leo Primary Directions

### FORMULA V

*To find Ascensional Difference*

$$AD = \text{asin}(\tan(\text{declination}^2) \times \tan(\text{birth latitude}))$$

### FORMULA VI

*To find Oblique Ascension*

$$OA = RA + \text{Ascensional Difference}$$

*Oblique Ascension of Houses*

$$\text{R.A. of M.C.} + 30^\circ = \text{oblique ascension of cusp of } 11^{\text{th}}$$

$$\text{R.A. of M.C.} + 60^\circ = \text{oblique ascension of cusp of } 12^{\text{th}}$$

$$\text{R.A. of M.C.} + 90^\circ = \text{oblique ascension of cusp of } 1^{\text{st}}$$

$$\text{R.A. of M.C.} + 120^\circ = \text{oblique ascension of cusp of } 2^{\text{nd}}$$

$$\text{R.A. of M.C.} + 150^\circ = \text{oblique ascension of cusp of } 3^{\text{rd}}$$

### FORMULA VII

*To find Semi-Arc*

$$\text{Diurnal Semi-arc} = 90^\circ + \text{Ascensional Difference}$$

$$\text{Nocturnal Semi-arc} = 90^\circ - \text{Ascensional Difference}$$

### FORMULA VIII

*Oblique Ascension being given, to find the degree of Longitude on  
the cusp of any House*

#### PART I

$$A = \text{atan}(\cos(OA) \times \tan(\text{house pole}^3))$$

#### PART 2

*If OA is less than 90° or greater than 270°, B = A + obliquity of ecliptic*

*If OA is greater than 90° and less than 270°, B = absolute difference between A and obliquity of ecliptic*

NOTE: reverse the rules for Southern latitudes.

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<sup>2</sup> If Declination is South, value is -declination

<sup>3</sup> The pole of the Ascendant is the birth latitude, the pole of the 10<sup>th</sup> House is 0°, the poles of the remaining houses can be calculated using Formula IX below

## Alan Leo Primary Directions

### PART 3

$$C = \text{atan}(\sin(B) / \cos(A) \times \tan(OA))$$

### FORMULA IX

*To find the pole of any House*

#### PART I

$$X = \text{asin}(\tan(\text{obliquity of ecliptic}) \times \tan(\text{birth latitude}))$$

#### PART 2

$$\text{Pole of 11}^{\text{th}} \text{ and 3}^{\text{rd}} = \text{atan}(\sin(X / 3) / \tan(\text{obliquity of ecliptic}))$$

#### PART 3

$$\text{Pole of 12}^{\text{th}} \text{ and 2}^{\text{nd}} = \text{atan}(\sin(X / 3 \times 2) / \tan(\text{obliquity of ecliptic}))$$

This is the usual Formula from which Table of Houses for northern latitudes are calculated. Mr. J. G. Dalton has recommended the use of about 18° 30' declination instead of the full obliquity of 23° 27', and a Table of Poles so calculated is given at the end of these Formulae. The difference is quite trifling except in very high latitudes. The exact obliquity of the ecliptic is given each year in the *Nautical Almanac* and other astronomical publications; it varies but very slightly from year to year<sup>4</sup>.

### FORMULA X

*R.A. and Declination being given, to find Longitude and Latitude*

#### PART I

$$A = \tan(\tan(\text{declination}) \times \sin(RA))$$

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<sup>4</sup> Most astrology software calculates and displays the obliquity of the ecliptic with the chart data.



## Alan Leo Primary Directions

### PART 2

If R.A. and declination same name (if R.A. is less than  $180^\circ$ , call it *North*; if more, call it *South*),  $B = A + \text{obliquity of ecliptic}$

If R.A. and declination be of different names, then the difference between  $A$  and the obliquity =  $B$ .

### PART 3

For Longitude:

$$\text{Longitude} = \text{atan}(\sin(A) / \sin(B))$$

### PART 4

For Latitude:

$$\text{Latitude} = \text{asin}(\sin(A) \times \cos(B) \times \sin(\text{declination}))$$

## FORMULA XI

*Longitude and Latitude being given, to find RA and Declination*

$$\text{RA} = \sin(\cos(\text{declination}) / \cos(\text{latitude}) \times \cos(\text{longitude}))$$

## FORMULA XII

*Longitude, Latitude, and Declination being given, to find RA*

$$\text{RA} = \text{acos}(\cos(\text{latitude}) \times \cos(\text{longitude}) / \cos(\text{declination}))$$

*If longitude is between  $90^\circ$  and  $270^\circ$ , add  $180^\circ$*

*If longitude is between  $270^\circ$  and  $360^\circ$ , add  $360^\circ$*

## Alan Leo Primary Directions

The following are the rules for measuring a planet's mundane position. If the Cuspal Distance is written in the Speculum it should be stated clearly from which cusp it is measured, and whether the planet is above or below, E. or W. of that cusp. It is convenient to measure from the nearest cusp, but when a planet is in about the middle of a house the distance may be taken from either cusp\*.

### FORMULA XIII

#### TO MEASURE MUNDANE POSITION OR CUSPAL DISTANCE

*For a planet in the First House.* Its lower M.D. subtracted from its nocturnal S.A. will give its distance below the cusp of the First House.

Two thirds of its nocturnal S.A. subtracted from its lower M.D. will give the distance above the cusp of the Second House.

*For a planet in the Second House.* Its lower M.D. subtracted from two thirds of its nocturnal S.A. gives its distance below the cusp of the Second House.

One third of its nocturnal S.A. subtracted from its lower M.D. gives its distance above the cusp of the Third House.

*For a planet in the Third House.* Its lower M.D. subtracted from one third of its nocturnal S.A. gives its distance below the cusp of the Third House.

Its lower M.D. is its distance east of the cusp of the Fourth House.

*For a planet in the Fourth House.* Its lower M.D. is its distance west of the cusp of the Fourth House.

Its lower M.D. subtracted from one third of its nocturnal S.A. gives its distance below the cusp of the Fifth House.

*For a planet in the Fifth House.* One third of its nocturnal S.A. subtracted from its lower M.D. gives its distance above the cusp of the Fifth House.

Its lower M.D. subtracted from two thirds of its nocturnal S.A. gives its distance below the cusp of the Sixth House.

*For a planet in the Sixth House.* Two thirds of its nocturnal S.A. subtracted from its lower M.D. gives its distance above the cusp of the Sixth House.

Its lower M.D. subtracted from its nocturnal S.A. gives its distance below the cusp of the Seventh House.

\* NOTE: - The position of a planet as shown in the ordinary map of the horoscope is its position as measured on the ecliptic. Mundane position as calculated by these rules is the position of the body of the planet according to its semi-arc, expressed in degrees measured on the equator. Occasionally it happens that, owing to a planet's latitude, while according to the ordinary map it is in one house, yet when calculated by these rules it appears in another. An instance occurs in the case of Mrs. Besant's horoscope, in which Venus, though apparently in the seventh house, is really, owing to its large south latitude, in the sixth. This is explained later on.

## Alan Leo Primary Directions

*For a planet in the Seventh House.* Its upper M.D. subtracted from its diurnal S.A. gives its distance above the cusp of the Seventh House.

Two thirds of its diurnal S.A. subtracted from its upper M.D. gives its distance below the cusp of the Eighth House.

*For a planet in the Eighth House.* Its upper M.D. subtracted from two thirds of its diurnal S.A. gives its distance above the cusp of the Eighth House.

One third of its diurnal S.A. subtracted from its upper M.D. gives its distance below the cusp of the Ninth House.

*For a planet in the Ninth House.* Its upper M.D. subtracted from one third of its diurnal S.A. gives its distance above the cusp of the Ninth House.

Its upper M.D. is its distance west of the cusp of the Tenth House.

*For a planet in the Tenth House.* Its upper M.D. is its distance east of the cusp of the Tenth House.

Its upper M.D. subtracted from one third of its diurnal S.A. gives its distance above the cusp of the Eleventh House.

*For a planet in the Eleventh House.* One third of its diurnal S.A. subtracted from its upper M.D. gives its distance below the cusp of the Eleventh House.

Its upper M.D. subtracted from two thirds of its diurnal S.A. gives its distance above the cusp of the Twelfth House.

*For a planet in the Twelfth House.* Two thirds of its diurnal S.A. subtracted from its upper M.D. gives its distance below the cusp of the Twelfth House.

Its upper M.D. subtracted from its diurnal S.A. gives its distance above the cusp of the First House.

### TABLE OF POLES OF HOUSES

(From Dalton's *Spherical Basis of Astrology*)

Latitude	11 <sup>th</sup> & 3 <sup>rd</sup>	12 <sup>th</sup> & 2 <sup>nd</sup>	Latitude	11 <sup>th</sup> & 3 <sup>rd</sup>	12 <sup>th</sup> & 2 <sup>nd</sup>
°	° ' "	° ' "	°	° ' "	° ' "
0	0 0.0	0 0.0	42	16 55.1	31 11.3
1	0 20.0	0 40.0	44	18 06.3	33 01.7
4	1 20.1	2 40.2	46	19 22.1	34 55.5
7	2 20.7	4 40.8	48	20 42.8	36 52.8
10	3 21.9	6 42.4	50	22 09.0	38 53.6
13	4 24.3	8 45.3	51	22 54.6	39 55.5
16	5 28.0	10 49.8	52	23 41.9	40 58.6
19	6 33.5	12 56.5	53	24 31.2	42 02.8
22	7 41.4	15 05.9	54	25 22.6	43 08.1
25	8 52.0	17 18.3	55	26 16.1	44 14.5
28	10 05.8	19 34.2	56	27 12.0	45 22.1
31	11 23.5	21 54.1	57	28 10.5	46 31.0
34	12 45.8	24 18.7	58	29 11.8	47 41.2
37	14 13.7	26 48.6	59	30 16.3	48 52.7
40	15 48.1	29 24.1	60	31 24.1	50 05.7

## Alan Leo Primary Directions

### CHAPTER XXI

#### THE SPECULUM

A SPECULUM is a table appended to a horoscope giving a variety of particulars necessary both for deciding the exact mundane aspects and positions of the heavenly bodies in the houses and for computing primary directions. Different practitioners adopt different forms of speculum, giving more or less detail, but it is necessary in all cases to include Latitude, Declination, Right Ascension (abbreviated R.A.), Meridian Distance (M.D.), and Semi-arc (S.A.); and to these are sometimes added, for convenience of reference, the Cuspal Distances. Anyone who is engaged upon the task of computing directions for a series of years will also find it advisable to write the Ternary Proportional Logarithms under the M.D. and the S.A. to save time.

This chapter will be devoted to calculating these details in the horoscope of Mrs. Annie Besant, born 1<sup>st</sup> October 1847, 5:29 p.m. London.

Those readers who have seen Mrs. Besant's autobiography will notice that the time of birth is there given as 5:39 p.m., or ten minutes later than that which is employed in this chapter. The reason for this difference is that the horoscope here given has been carefully rectified by primary arcs according to events. Mrs. Besant herself said many years ago that the time was somewhere between 5 pm and 5:40 pm, so that the rectification that has taken place is not contrary to probability.

It is assumed that the reader is already acquainted with the rules for calculating a horoscope with accuracy and precision, and these will, therefore, not be repeated here. The subject is fully explained in the companion volume in this series, *Casting the Horoscope*. For the purposes of Secondary Directions, the minute accuracy of the time of birth is not absolutely essential, (except for those who take into account directions to the ascendant and mid-heaven), because a few minutes difference earlier or later will

## Alan Leo Primary Directions

make comparatively little change in the positions of Sun, Moon and planets. With Primary Directions, however, it is necessary that the time should be known very precisely or should have been carefully rectified; because, as will be seen later on, a difference of one degree of RA on the meridian, or four Minutes of Sidereal Time will introduce an error that will amount on an average to one year in the measurement of the directions; rather more with some, and rather less with others. So that if the time of birth is very uncertain, or if the horoscope has not been rectified satisfactorily, it is practically useless calculating Primary Directions.

It is necessary to employ logarithms frequently in the calculations that follow and the reader should possess a good work of reference containing them. *Chamber's Mathematical Tables* is one of the best, and the logarithms chiefly used are those headed in it 'Logarithmic Sines, Tangents and Secants' and 'Ternary Proportional Logarithms', although it also contains other tables of reference of considerable practical use to anyone engaged in astrological computations. In the chapters that follow calculations will be made to the nearest minute of arc only, for the sake of simplicity, but they can be carried to seconds of arc by taking proportional parts of the differences between successive logarithms according to the instructions given in the 'Explanation' of *Chambers*.\*

## RIGHT ASCENSION

If the reader possesses a *Nautical Almanac* for the year of birth, the RA of Sun, Moon, or planet can be computed from this, where it is given in time at Greenwich Noon each day, first turning the time into arc by means of the Table for Reducing time to

\* Chamber's Tables are admirable for many purpose and are indeed indispensable as a work of reference, but where *many* calculations have to be performed of the kind now to be described, (namely such as involve any of the formulae in Chapter XX), the 7-figure logs. of those Tables are inconvenient and unnecessary, 5-figure logs. being quite accurate enough for all ordinary purposes, and quicker to use. An excellent set of 5-figure tables is published by Dr. Schlomilch of Brunswick, which on account of its convenience of arrangement is not only a time-saver, but renders mistakes less likely. It will not serve as a *substitute* for Chamber's Tables, however, as it does not contain the Ternary Proportional Logarithms. It can be obtained for a few shillings.

## Alan Leo Primary Directions

Degrees in *Chambers*. But as most students will probably not have access to a *Nautical Almanac*, we will calculate RA from the Longitudes, Latitudes, and Declinations given in the horoscope, which is assumed to have been calculated already.

(1) The Sun's longitude in Mrs. Besant's horoscope is  $\Omega 7^{\circ} 54'$ ; what is its RA? Because the Sun has no latitude, Formula I of the Trigonometrical Formulae must be used

$$\begin{aligned} \text{RA} &= \text{atan}(\tan(187^{\circ} 54') \times \cos(23^{\circ} 27')) \\ &= \text{atan}(\tan(187.9) \times \cos(23.45)) \\ &= \text{atan}(0.1273) \\ &= 7.25 + 180 \\ &= 187.25 \text{ or } 187^{\circ} 15' \end{aligned}$$

The RA of the Sun is  $7^{\circ} 15'$  from the first point of Libra, or  $187^{\circ} 15'$  from the first point of Aries. This is entered in its proper place in the Speculum.

The Sun is the only heavenly body that never has latitude; the others usually have more or less, except when they are exactly on the ecliptic. In this horoscope the least latitude is that of Jupiter, which is only  $0^{\circ} 5'$  South; while the greatest is Venus, which is  $8^{\circ} 14'$  South. Since the longitudes, latitudes, and declinations are known, the RA can be calculated by means of Formula XII.

(2) What is the RA of Venus in Mrs. Besant's horoscope? The longitude of Venus is  $\Omega 11^{\circ} 4'$ , latitude  $8^{\circ} 14'$  S, declination  $11^{\circ} 56'$  S.

$$\begin{aligned} \text{RA} &= \text{acos}(\cos(8^{\circ} 14') \times \cos(11^{\circ} 4') / \cos(11^{\circ} 56')) \\ &= \text{acos}(\cos(8.23) \times \cos(11.07) / \cos(11.93)) \\ &= \text{acos}(0.9927) \\ &= 6.91 + 180 \\ &= 186.91 \text{ or } 186^{\circ} 54' \end{aligned}$$

That is to say, the RA of Venus is  $6^{\circ} 54'$  from the first point of Libra, or  $186^{\circ} 54'$  from the first point of Aries.

The RA of each of the other heavenly bodies can be calculated in the same way, including any fixed stars that it may be thought desirable to incorporate into the horoscope. The only one that is likely to show any difference from the RA given in the *Nautical Almanac* is the Moon; and the reason for this is that her rate of motion in the zodiac varies somewhat, not only from day to day but even during the same 24 hours, so that when the birth is considerably removed from noon, a variation of one or two minutes of arc may be noticed.

## Alan Leo Primary Directions

This, however, is only slight and can be corrected from the *Nautical Almanac* if thought necessary, for there the Moon's RA is given for every hour.

### MERIDIAN DISTANCE

This is computed by taking the difference between the RA of the planet, as just determined, and that of the MC (cusp of the 10<sup>th</sup> house or upper meridian) or of the IC (cusp of the 4<sup>th</sup> house or lower meridian), whichever is nearest by mundane – nor zodiacal – position.

(3) What is the MD of the Sun?

RA of MC	272° 4'
RA of ☉	<u>187° 15'</u>
MD of ☉	<u>84° 49'</u>

(4) What is the MD of Venus?

RA of ♀	186° 54'
RA of IC	<u>92° 4'</u>
MD of ♀	<u>94° 50'</u>

The distance of Venus is taken from the lower meridian and not the upper because, owing to the great south latitude of the planet, it is really below the cusp of the seventh house, although its zodiacal position is above. This is a rather unusual case and should be noticed carefully by the student, because if the lower meridian distance is mistaken for the upper it may lead to serious error in calculating directions. Instructions for finding the exact mundane position of any planet are given further on in the section headed *Cuspal Distance*. When planets are close to the horizon, as in this case, it is generally necessary to insert both meridian distances in the speculum, because both will be required in calculating directions; the upper meridian distance may be distinguished by the letter D (diurnal) and the lower by the letter N (nocturnal). Either distance subtracted from 180° will give the other.

### SEMI-ARC

A planet's arc is the time it remains above or below the horizon. The semi-arc, or half the full arc, is used in the speculum. When a heavenly body is above the horizon by mundane position, its diurnal semi-arc is used, which is half the time it remains above the horizon; when below the horizon by mundane position, its nocturnal semi-arc is used, which is half the time it remains below the

## Alan Leo Primary Directions

horizon. When close to the horizon both semi-arcs may be inserted in the speculum, because both are likely to be required in calculating directions; and they may be distinguished by the letters D and N. For convenience of calculation, semi-arcs are expressed in degrees and minutes, not in time.

The SA of Sun, Moon, or planet is computed according to Formula VII, before using which it will be necessary to ascertain the Ascensional Difference by means of Formula V.

(5) What is the SA of the Sun? It is above the horizon by mundane position; declination  $3^{\circ} 8' S$ ; latitude of birthplace  $51^{\circ} 32' N$ . By Formula V: --

$$\begin{aligned} AD &= \text{asin}(\tan(3^{\circ} 8' S) \times \tan(51^{\circ} 32')) \\ &= \text{asin}(\tan(-3.13) \times \tan(51.53)) \\ &= \text{asin}(-0.0688) \\ &= -3.95 \text{ or } -3^{\circ} 57' \end{aligned}$$

The Sun's ascensional difference is  $-3^{\circ} 57'$ , and by Formula VII the Sun's diurnal SA is  $86^{\circ} 3' (90^{\circ} + (-3^{\circ} 57'))$ .

(6) What is the SA of Venus? Its declination is  $11^{\circ} 56' S$ . As pointed out in the section on Meridian Distance, there is a difficulty in connection with Venus in this horoscope against which it is necessary to be on our guard. Its zodiacal position is in the seventh house, and, in the absence of instructions to the contrary, a beginner would probably proceed to calculate the diurnal SA. This would be a source of confusion, however, because, as will be seen when the Cuspal Distance is calculated in the next section, Venus is really  $10^{\circ} 36'$  below the cusp of the seventh house by mundane position, and its nocturnal SA is that which should be inserted in the speculum. By Formula V: --

$$\begin{aligned} AD &= \text{asin}(\tan(11^{\circ} 56' S) \times \tan(51^{\circ} 32')) \\ &= \text{asin}(\tan(-11.93) \times \tan(51.53)) \\ &= \text{asin}(-0.2659) \\ &= -15.42 \text{ or } -15^{\circ} 25' \end{aligned}$$

The ascensional difference of Venus is  $15^{\circ} 26'$ , and by Formula VII its nocturnal SA is  $105^{\circ} 26' (90^{\circ} - (-15^{\circ} 25'))$ .

It will be seen that the lower MD of Venus is less than its nocturnal SA, and this shows that the planet is actually below the horizon. If the lower MD and the nocturnal SA are each subtracted from  $180^{\circ}$  in order to ascertain the diurnal values, it will be found that its upper MD is  $85^{\circ} 10'$  and its diurnal SA  $74^{\circ} 34'$ ;



## Alan Leo Primary Directions

that is to say, its upper MD is in excess of its diurnal SA, which is a proof that it is really below the horizon by the amount of the excess, and that the nocturnal values are those which should be first inserted in the Speculum

The reason for the unusual difference between zodiacal and mundane position in the case of Venus in this horoscope is the extreme amount of south latitude the planet possesses.

(7) What is the SA of the Moon? Its declination is 17° 35' N and it is below the horizon. By Formula V: --

$$\begin{aligned}AD &= \text{asin}(\tan(17^\circ 35') \times \tan(51^\circ 32')) \\&= \text{asin}(\tan(17.58) \times \tan(51.53)) \\&= \text{asin}(0.3978) \\&= 23.50 \text{ or } 23^\circ 30'\end{aligned}$$

The Moon's ascensional difference is 23° 30', and by Formula VII its nocturnal SA is 66° 30' (90° - 23°30').

## CUSPAL DISTANCE

Cuspal distance shows a planet's mundane position in the houses as distinguished from its zodiacal position. The reason why the two do not usually coincide is because all heavenly bodies except the Sun generally have latitude, that is they are either to the north or south of the ecliptic or Sun's path, and therefore appear to rise and set in a different circle from that of the Sun. The zodiacal position of a planet as marked in the ordinary map of the horoscope is its place measured along the ecliptic; but if the planet has latitude it is not really in that position; and because of this a distinction has to be drawn between its zodiacal or ecliptic place and its position on its own semi-arc.

It is not quite correct to measure the distance of a planet from a cusp by degrees of longitude; this is only a rough and ready method, although there will be no serious error unless the planet's latitude is considerable. In Mrs. Annie Besant's horoscope it has been already pointed out that the zodiacal position of Venus is above the cusp of the seventh house, but that its mundane position – that is, the place occupied by the actual body of the planet – is 10° 36' below the cusp of the seventh.

Mundane position is where the body of the planet really is placed, as measured along its own semi-arc.\*  
Zodiacal position is

\* this expression is figurative; the planet does not actually travel along the semi-arc

## Alan Leo Primary Directions

that which the planet would have if it were exactly on the ecliptic, that is, had no latitude. The difference between the two positions depends on the amount of the latitude; if this is small, the difference will be slight; if the latitude is great, the difference will be considerable.

The house-space of any heavenly body depends entirely upon its semi-arc. One third of its semi-arc measures one house-space; two thirds, two house-spaces; and so on. In accordance with this, the rules for measuring mundane position by Cuspal Distance given in the previous chapter have been drawn up. The following examples will show how to apply them.

(8) What is the Cuspal Distance of the Sun in Mrs. Besant's horoscope?

Diurnal SA	80° 03'
Upper MD	<u>84° 49'</u>
Distance above cusp of 7 <sup>th</sup>	<u>1° 14'</u>

(9) What is the Cuspal Distance of Venus?

Nocturnal SA	105° 26'
Lower MD	<u>94° 50'</u>
Distance below cusp of 7 <sup>th</sup>	<u>10° 36'</u>

(10) What is the Cuspal Distance of Mars?

Lower MD	48° 34'
2/3 nocturnal SA	<u>47° 51'</u>
Distance above cusp of 2 <sup>nd</sup>	<u>0° 43'</u>

(11) What is the distance of Mars below the cusp of the ascendant?

Nocturnal SA	71° 47'
Lower MD	<u>48° 34'</u>
Distance below cusp of 1 <sup>st</sup>	<u>23° 13'</u>

## CHAPTER XXII

### MUNDANE DIRECTIONS TO ANGLES

PRIMARY Directions are all formed within a few hours after birth; each four minutes of sidereal time after birth (or, what comes to the same thing, the passage of each degree of Right Ascension across the meridian) measuring to one year of life. At this rate it will be seen that all Primary Directions in the life of a person 90 years old are completely formed within  $90 \times 4 = 360$  minutes, or 6 hours. Why directions that are formed within six hours of birth should not produce their effect in the life history until a great many years afterwards is an interesting problem, but it is impossible to stop to consider it here and it must be relegated to the philosophical or esoteric department of astrology.

Secondary Directions take longer to form, at the rate of one day for each year of life. The fact that they are not completed until long after the corresponding Primary Directions is the real reason why they are called Secondary. They are Secondary in point of time; but they resemble Primary Directions in the fact that they are completed in the horoscope long before they produce their effect in the outer world. A Secondary Direction that operates at the age of 90 will have been formed 90 days, or about 3 months, after birth.

Another distinction between these two systems lies in the fact that, whereas Secondary Directions depend upon the movements of Sun, Moon, and planets in the zodiac after birth, as shown in the Ephemeris, Primary Directions are all formed by the rotation of the earth on its axis and bear no necessary relation to the movements of the heavenly bodies in the zodiac. This will be fully illustrated in the chapters that follow.

As a result of the earth's axial rotation, the heavenly bodies appear to rise and set, passing through the mundane houses. For instance, if a man is born with the Sun exactly rising, the eastward axial rotation of the earth will carry the Sun to the cusp of the tenth house in a few hours, and this will constitute a Primary direction, MC  $\propto$   $\odot$ .

## Alan Leo Primary Directions

But here an important qualification must be made. On an average it will take the Sun about six hours to pass from the cusp of the first house to that of the tenth, more in summer and less in winter; and during this the Sun will move forward in the zodiac about a quarter of a degree.

*This real forward motion is ignored in the Primary system. The direction is made not to the moving Sun but to the degree and minute of the zodiac that the Sun occupied at birth.*

For instance, if the sun was exactly rising a 1 ♉ 0 at birth, the Primary direction MC ! Q will be complete when 1 ♉ 0 is exactly on the cusp of the tenth house.

This holds good all round. Primary Directions deal with the zodiacal and mundane positions of the heavenly bodies at the moment of birth, and with the changes afterwards caused in these positions by the axial rotation of the earth. The actual movements of Sun, Moon, and planets through the zodiac after birth belong to the Secondary System.

## MUNDANE VERUS ZODIACAL POSITION

In studying Primary directions it is necessary to bear in mind the distinction between zodiacal and mundane position. For instance in Mrs. Besant's horoscope the zodiacal position of Jupiter is 18 ♊ 25, and its mundane position is on the cusp of the fifth house. For the purposes of astrology, Jupiter's influence is considered to be impressed so strongly upon these two points that they are treated as if Jupiter really remained there during the whole of the life, so that when directions are made to them or transits pass over them the effect is that of a direction or a transit to Jupiter itself, no matter how many years have elapsed. The same is true of the other heavenly bodies; each is regarded as permanently stationed in that longitude, latitude, declination, and mundane position which is occupied at birth.

It would be out of place to stop to consider such a statement as this now; that also must be left to esoteric or philosophical astrology.

Primary directions are concerned with the effects of the earth's axial rotation in separating the zodiacal positions that were occupied by the heavenly bodies at birth from their mundane positions, and with the new relationships that are brought about as a result.

## Alan Leo Primary Directions

For instance, axial rotation will make Jupiter (or rather 18 D 25 where Jupiter is regarded as permanently posited) pass downward through the fourth house until it reaches the cusp, when the direction MC  $\circ$  4 will be formed. The planet will then rise up, by the same eastward axial rotation, on to the cusp of the third house, forming MC  $\pi$  4; then to the cusp of the 2<sup>nd</sup> house, MC  $\Delta$  4; and then to that of the ascendant, Asc  $\sigma$  4.

These directions may be either what are called zodiacal or mundane or both, according to circumstances, and this leads to the consideration of the next subject to which it is necessary to call attention.

## ZODIACAL AND MUNDANE ASPECTS

Primary directions fall into two general classes, which are called zodiacal and mundane directions. These are based partly upon the distinction that has just been drawn between position in the zodiac and position in the mundane houses, and partly upon the distinction between zodiacal and mundane aspects.

The reader will be too familiar with the subject to require any explanation of zodiacal aspects here. Mundane aspects depend upon distance in the mundane houses. Two bodies that are one house apart are in mundane semi-sextile; one and a half houses, mundane semi-square; two houses, mundane sextile; three houses, mundane square; and so on. It is important to remember, however, that these houses are measured not by the zodiacal degrees on the cusps in the horoscope of birth but by proportional parts of a planet's semi-arc. Any planet's semi-arc measures three mundane houses for that planet; two thirds of its semi-arc, two houses; one third of its semi-arc, one house; and so on. For instance, if a given planet is distant by its whole semi-arc from a certain point, the planet will be in mundane square to that point; if they are separated by two thirds of the planet's semi-arc, they will be in mundane sextile; if by half the semi-arc, they will be in mundane semi-square; and so on.

The beginner must not allow himself to be misled by the fact that some Primary directions are called zodiacal. This term as used in the Primary System does not imply real motion in the zodiac; it only means that the aspects upon which zodiacal directions are based are measured in the zodiac and not in the houses. In Mrs. Besant's horoscope the Sun is at 7  $\Omega$  54 just above the cusp of the

## Alan Leo Primary Directions

7<sup>th</sup> house. A mundane trine to the Sun will fall a short distance to the west of the cusp of the 3<sup>rd</sup> house, and a zodiacal trine, a short distance to the east of the same cusp, where 7 ♀ 54 was situated at birth. By the eastward axial rotation of the earth, the Mon's place at 12 ♂ 52 will pass downwards through the 4<sup>th</sup> house and then upwards through the 3<sup>rd</sup> and 2<sup>nd</sup>. When it gets a short distance (ascertained by calculation) westward of the 3<sup>rd</sup> cusp, it will form the Primary *mundane* direction ♄ △ ☉. When it has gone further and reached a short distance eastward of the same cusp, it will form the Primary *zodiacal* direction ♄ △ ☉. The one direction is mundane and the other is zodiacal, but both are formed in exactly the same way, by the eastward axial rotation of the earth; they only differ in the points to which they measure.

The whole Primary system of directing thus falls into two classes, Mundane and Zodiacal. It is better to begin with the first of these, because it is the simpler of the two.

### MUNDANE DIRECTIONS TO THE ANGLES

Mundane directions may be made to the two angles, *i.e.* the cusps of the first and tenth houses, or to the luminaries and planets. Directions to the angles are easier, simpler, and less complicated mathematically than are the others, and are therefore the best with which to begin.

Mundane directions are again subdivided into direct directions and converse directions. A direct mundane direction is one in which the body directed moves, or rather appears to move, in the direct order of motion in the houses; as when Saturn in Mrs. Besant's horoscope rises up through the twelfth, eleventh, and tenth houses to form MC ♂ ♄. A converse mundane direction is one in which the body directed appears to move in the opposite order to this, as when Saturn passes down through the twelfth to form Asc. ♂ ♄.

It will be noticed that in a direct mundane direction the body directed moves *clockwise*, *i.e.* in the order of the hands of a clock; but that in converse mundane directions it moves anti-clockwise, contrary to the hands of a clock.

### DIRECT MUNDANE DIRECTIONS TO ANGLES

Mrs. Besant's horoscope shows that Uranus was in the ascendant

## Alan Leo Primary Directions

at birth. Direct mundane motion will carry it on to the cusp of the ascendant, and then through the twelfth and eleventh houses and upwards to the cusp of the tenth, in the course of which it will form various aspects. When Uranus or any other body is exactly on the cusp of the ascendant, it will be distant by its diurnal semi-arc from the cusp of the tenth; but any planet that is its whole semi-arc distant from a point is in mundane square to that point; so that when Uranus is in mundane conjunction with the cusp of the ascendant it will be in mundane square with the cusp of the tenth. In fact, any mundane aspect to one of these two points is also a mundane aspect of some sort to the other.

(1) *What is the arc of direction Asc ! X, mundane?*

Formula XIII shows that to measure a planet's mundane distance from the cusp of the first house, when it is in that house, its lower MD must be subtracted from its nocturnal SA. To do this is the same thing as calculating the arc of direction here required.

Nocturnal SA X	82° 30'
Lower MD	<u>76° 30'</u>
(1) Asc ♂ or MC ♀ mund.	<u>6° 1'</u>

Primary arcs are converted into time by allowing one year of life for each degree of arc, so that this one measures to the age six years, October 1853.

When one mundane direction has been computed in this way, others can be derived from it by adding proportional parts of the planet's SA; and in this case, because any further motion will compel Uranus to rise above the ascendant, its *diurnal* SA must be used and not the nocturnal which was employed to measure its distance below the horizon.

Asc ♂ mund.	6° 0'
1/3 diurnal SA	<u>32° 30'</u>
(2) Asc ♀ or MC * mund.	38° 30'
1/6 diurnal SA	<u>16° 15'</u>
(3) Asc ∟ or MC ∟ mund.	54° 45'
1/6 diurnal SA	<u>16° 15'</u>
(4) Asc * or MC ♀ mund.	71° 0'
1/3 diurnal SA	<u>32° 30'</u>
(5) Asc ♀ or MC ♂ mund.	<u>103° 30'</u>

Direction (2) shows Uranus on the cusp of the twelfth house, and measures to age 38 years 6 months.

Direction (3) shows it in the middle of the eleventh house, and measures to age 54 years 9 months.

## Alan Leo Primary Directions

Direction (4) shows it on the cusp of the eleventh house, and measures to age 71 years.

Direction (5) shows it on the cusp of the tenth house. Life is not likely to be prolonged to the age signified by this direction, 103 years 6 months, but it serves to show the method of formation of such directions as these. King Edward VII, who had both  $\odot$  and  $\text{♄}$  in the ascendant at birth, lived to experience this direction, the semi-arcs of these planets being considerably less than that of Uranus in the present instance.

It will be seen from these examples that the general rule for calculating direct mundane directions to angles runs as follows: --

Ascertain the distance of the to-be-directed planet from the cusp to which it will next pass by the eastward axial rotation of the earth. Formula XIII for finding Cuspal Distances will show how this can be done. This is the first direction, and subsequent directions are formed from it by adding proportional parts of the planet's SA; always remembering to use the nocturnal SA so long as the planet is below the horizon, but the diurnal SA when a direction carries it above the horizon.

All ordinary mundane aspects to angles, conjunction,  $30^\circ$ ,  $60^\circ$ ,  $90^\circ$ ,  $120^\circ$ ,  $150^\circ$ , and  $180^\circ$ , fall on cusps of houses, and require the addition (or subtraction as the case may be) of one third of the SA. Such mundane directions to the angles as  $45^\circ$  and  $135^\circ$  fall in the middle of either the second, the fifth, the eighth, or the eleventh house, and require the addition of only one sixth of the SA, as shown in the above examples.

The foregoing directions have all been formed by addition of proportional parts of the planet's SA; but it is possible, and sometimes more convenient, to begin with a very extreme direction and then to work by subtraction. The following examples are all direct mundane directions of Mars to the angles, beginning with the mundane conjunction with the mid-heaven.

At birth Mars was on the cusp of the second house. Its lower MD was  $48^\circ 34'$ , and therefore by subtraction from  $180^\circ$  its upper MD is  $131^\circ 26'$ .

This is also the arc of direction  $MC \propto \odot$  or  $Asc \square \odot$ , mundane direct, and other directions can be derived from it by subtraction. The diurnal SA has to be used so long as the direction



## Alan Leo Primary Directions

that is formed is above the horizon; but as soon as the aspect falls below the horizon a change must be made to the nocturnal SA. The conjunction of any planet with the Ascendant shows its presence exactly on the horizon; above that everything is diurnal, and below it, nocturnal.

(6)	MC $\propto$ $\odot$ or Asc $\square$ $\odot$ mund.	131° 26'
	1/3 diurnal SA	<u>36° 4'</u>
(7)	MC $\propto$ $\odot$ or Asc. $\ast$ $\odot$ mund.	95° 22'
	1/6 diurnal SA	<u>18° 2'</u>
(8)	MC $\angle$ $\odot$ or Asc $\angle$ $\odot$ mund.	77° 20'
	1/6 diurnal SA	<u>18° 2'</u>
(9)	MC $\ast$ $\odot$ or Asc $\propto$ $\odot$ mund.	59° 18'
	1/3 diurnal SA	<u>36° 4'</u>
(10)	MC $\square$ $\odot$ or Asc $\propto$ $\odot$ mund.	<u>23° 14'</u>

Direction (6) shows Mars on the cusp of the tenth house. Direction (7) shows it on the cusp of the eleventh house. Direction (8) shows it in the middle of the eleventh house, and measures to 77 years 4 months. Direction (9) shows it on the cusp of the twelfth house at age 59 years 4 months. Direction (10) shows it on the cusp of the Ascendant at age 23 years 3 months.

If the distance of Mars below the cusp of the Ascendant is estimated as given in Formula XIII the result is 23° 13', which differs from direction (10) by one minute of arc. The reason for the discrepancy is that in calculating directions (6) to (10) fractions of a minute have been ignored and have accumulated.

## CONVERSE DIRECTIONS TO ANGLES

Here the heavenly body directed appears as if it moved in the opposite direction to that which it takes under the influence of direct directions. The whole subject of converse directions has been much in dispute both in ancient and modern times, but it is best to reserve comment until some illustrations have been given.

*It is required to calculate some of the converse directions of Uranus to the angles.*

In direct motion, as has been shown in the previous section, the eastward axial rotation of the earth makes Uranus appear to rise up to the cusp of the Ascendant and to pass through the twelfth, eleventh, and tenth houses toward the upper meridian. In converse motion the planet appears to travel in the opposite direction, down to the cusp of the second house and then through the second and third houses towards the lower meridian.

## Alan Leo Primary Directions

The first converse mundane direction of this kind that Uranus can form will be that which brings it on to the second cusp, because when there it will be in mundane semi-sextile to the Ascendant and in mundane trine to the mid-heaven. It is, therefore, necessary to begin by finding the distance of the planet from the second cusp according to the Formula for finding cuspal Distances.

	Lower MD X	76° 30'
	2/3 Nocturnal SA	<u>55° 00'</u>
(11)	Asc ♊ or MC ♈ mund. con.	21° 30'
	1/6 nocturnal SA	<u>13° 45'</u>
(12)	Asc ♋ or MC ♊ mund. con.	35° 15'
	1/6 nocturnal SA	<u>13° 45'</u>
(13)	Asc ♏ or MC ♋ mund. con.	49° 00'
	1/3 nocturnal SA	<u>27° 30'</u>
(14)	Asc ♍ or MC ♏ mund. con.	76° 30'

Direction (11) shows Uranus on the cusp of the second house, and it measures to age 21 ½ years. Direction (12) shows it in the middle of the second house, and measures 35 years 3 months. Direction (13) shows it on the third cusp, and measures to 49 years. Direction (14) shows it on the cusp of the fourth house, and measures to 76 years 6 months.

If these calculation have been made correctly, direction (14) should be the same as the lower MD of Uranus, and a glance at the Speculum will show that this is so.

The converse directions of Jupiter can be calculated similarly. The Speculum shows that at birth the planet is 1° 48' E of the 5<sup>th</sup> cusp. This is the arc of the first converse direction.

(15)	Asc ♊ or MC ♏ mund. con.	1° 48'
	1/6 nocturnal SA	<u>9° 51 ½'</u>
(16)	Asc ♋ or MC ♊ mund. con.	11° 39 ½'
	1/6 nocturnal SA	<u>9° 51 ½'</u>
(17)	Asc ♌ or MC ♋ mund. con.	21° 31'
	1/3 nocturnal SA	<u>19° 43'</u>
(18)	Asc ♍ or MC ♏ mund. con.	<u>41° 14'</u>

Direction (15) shows the planet on the cusp of the fifth house. Direction (16) shows it in the middle of the fifth house. Direction (17) shows it on the cusp of the sixth house; and Direction (18) on the cusp of the seventh.

Other converse directions might be formed by adding proportional parts of Jupiter's diurnal SA, but a sufficient number of examples have been given to show the method of calculation.

## Alan Leo Primary Directions

### THE RATIONALE OF CONVERSE DIRECTIONS

The question now arises as to whether converse directions are legitimate and possible, because many writers have either thrown doubt upon them or have wholly denied them. The earth rotates from west to east, and when a planet is situated just below the cusp of the ascendant, like Uranus in this horoscope, axial rotation will make it appear to rise through the twelfth, eleventh, and tenth houses, forming direct directions to do so. In order for it to form converse directions, it must sink down through the second and third houses towards the lower meridian, and it cannot do this unless the earth reverses its rotation, a thing which never happens.

This is the kind of argument that convinced many eminent astrologers in the past that has weight with some at the present day. Most astrologers now admit converse directions, but there is even now no universal agreement as to the manner of their formation. Briefly put, two explanations have been given.

The first explanation is that, in forming such a direction as MC  $\circ$  8, forces come into play that were in actual existence before the child's birth. In direction (14), Uranus was really on the cusp of the fourth house rather more than five hours before birth; and the effects signified by this are brought to fruition in the life history according to the usual time measure.

The second explanation is that the degree of RA that was on the cusp of the fourth house at birth, and therefore in opposition to the MC, rises through the third, and first houses until it reaches the mundane position that was occupied by Uranus at birth, so forming the direction MC  $\circ$  8. This is accomplished by the eastward axial rotation of the earth after birth; and a similar explanation applies to other converse directions.

It may be added that it is not easy to see why one of these explanations should be considered truer than the other. Each one seems to explain the phenomenon.

## Alan Leo Primary Directions

### CHAPTER XXIII

#### SOLAR AND LUNAR MUNDANE DIRECTIONS

MUNDANE directions between Sun, Moon, and planets are slightly more complicated than those to the angles because a rule-of-three sum is necessary in the calculations. All are worked in one and the same way; solar directions to the Moon and planets, lunar directions to the planets, and directions from one planet to another.

If attention is turned upon any two heavenly bodies in the horoscope, it is evident that one of them may be regarded as moving through the houses and the other as fixed. The one that moves does so because of the eastward axial rotation of the earth, and while it is moving it meets aspects of the other. For instance, Uranus is rising in Mrs. Besant's horoscope in opposition to the Sun setting. If we regard the Sun as fixed, the moving Uranus will rise through the twelfth, eleventh and tenth houses, and will meet various aspects of the Sun while doing so. On the other hand, if Uranus is regarded as fixed, the moving Sun will pass down through the sixth, fifth and fourth houses, and will meet several aspects of Uranus on its way. Both these movements will be brought about by the eastward axial rotation of the earth.

The moving body is called the body that is directed, and there are two systems of naming such directions.

#### TWO SYSTEMS OF NOMENCLATURE

According to one system, *direct* directions are those in which a planet is directed to an aspect of the Sun or Moon; while those in which the Sun or Moon is directed to an aspect of a planet are described as *converse*. This nomenclature is quite arbitrary and has proved confusing to most students as well as to many writers on the subject, because the terms do not bear the same meaning here as elsewhere. In mundane directions to angles, as shown in the previous chapter, we call that direct which seems to imply normal motion clockwise through the houses under the influence of axial rotation, such as the movement of Uranus from the first to the twelfth; and that is called converse which appears (whatever may be the true explanation of it) to require the heavenly body to move

## Alan Leo Primary Directions

anti-clockwise in a manner contrary to that which is caused by axial rotation, such as the passage of Uranus from the first to the second. But we are now asked to abandon this principle when dealing with mundane directions between the luminaries and the planets, and to adopt another that is entirely different. There is no scientific reason for such an unnecessary change. When, for example, Mercury is directed to the conjunction with the Sun in Mrs. Besant's horoscope, its movement is not more direct than is that of the Sun when directed to the conjunction of Jupiter. The two movements are the same; both are direct and neither is converse.

The other system of naming such directions, which will be adopted here, recognises that both those just mentioned are direct, and distinguishes them *by writing the moving body first*: -- ♄ ♂ ☉ means that Mercury moves to the conjunction with the stationary Sun; ☉ ♂ ♃ means that the Sun moves to the conjunction with the stationary Jupiter; and both are obviously direct: ☉ ♂ ♄ and ♃ ♂ ☉ would be converse directions if they could take place, because the former would mean that the Sun apparently moved conversely or anti-clockwise to the place of Mercury, and the latter would signify that Jupiter apparently moved conversely to the place of the Sun.

The question of whether such converse directions are possible may be postponed for the present.

## DIRECT MUNDANE DIRECTIONS

In this section will be considered those directions in which the moving body travels directly or clockwise through the houses; and the system will be followed of writing the moving body first.

It is required to calculate some of the mundane arcs of the Sun direct to aspects of Jupiter.

The Speculum shows that Jupiter is a short distance below (eastward) of the fifth cusp, and that it has only a small semi-arc. As the Sun sets, its first mundane aspect to Jupiter will be formed when the former is a short distance below the cusp of the seventh, for then the two will be in mundane sextile. The problem is to find out how far the Sun must be below the seventh cusp; for its distance must be in proportion to its semi-arc. To ascertain this a

## Alan Leo Primary Directions

sum in proportion is necessary, and the general rule for calculating all such direction, whether direct or converse, is as follows: --

*As the semi-arc of the fixed body is to its cuspal distance, so is the semi-arc of the moving body to its second distance from that cusp from which the aspect is formed.* The sum or difference of the first and second cuspal distances of the moving body (according to whether it crosses the cusp or not) gives the arc of direction.

Here the fixed body is Jupiter, the moving body is the Sun, the seventh cusp is that from which the aspect is reckoned, and the Sun has to cross it in order to form the aspect. The Sun's nocturnal semi-arc must be used because it will be below the horizon when the aspect is complete.

The rule in this case will, therefore, become: -- As the nocturnal SA of Jupiter is to its cuspal distance from the fifth, so is the nocturnal SA of the Sun to its second distance below the seventh cusp. This second distance, added to the sun's cuspal distance at birth above the seventh, will give the arc of direction.

Ternary proportional logs. from *Chambers* are employed, and the arithmetical complement is used in the first term. [The example is given using proportion without logs as today it is easier to do with a calculator.]

$$\begin{aligned} & 4 \text{ distance from } 5^{\text{th}} / 4 \text{ Nocturnal SA} \times \odot \text{ Nocturnal SA} \\ & = 1^{\circ}48' / 59^{\circ}9' \times 93^{\circ}57' \\ & = 2^{\circ}51' \end{aligned}$$

This shows the sun must be  $2^{\circ} 51'$  below the seventh cusp. This distance must be added to the Sun's cuspal distance above the seventh.

☉ above 7 <sup>th</sup> at birth	1° 14'
☉ second distance below 7 <sup>th</sup>	<u>2° 41'</u>
(19) Arc of direction ☉ * 4 mund. d.	<u>4° 5'</u>

Other directions can be formed from this by adding proportional parts of the Sun's SA just as was done with mundane directions to angles.

☉ * 4 mund. d.	4° 5'
1/6 nocturnal SA ☉	<u>15° 39 ½'</u>
(20) ☉ ∠ 4 mund. d.	19° 44 ½'
1/6 nocturnal SA ☉	<u>15° 39 ½'</u>
(21) ☉ ∨ 4 mund. d.	35° 24'
1/3 nocturnal SA ☉	<u>31° 19'</u>
(22) ☉ ∽ 4 mund. d.	<u>66° 43'</u>

## Alan Leo Primary Directions

In direction (19) the Sun is 2° 51' below the seventh cusp; in (20) it is the same distance below the middle of the sixth house; in (21) it is the same below the sixth cusp; and in (22) it is in conjunction with Jupiter, east of the fifth cusp.

*It is required to calculate some of the arcs of Mars directed to aspects of the Moon.*

The Moon will be the fixed body and Mars the moving one, rising over the ascendant and going towards the mid-heaven precisely as it did in directions (6) to (10), except that these were calculated in reverse order so as to illustrate the process of subtraction. The first aspect formed will be the square, when Mars is a similar distance below the horizon to that of the Moon westward of the lower meridian, in the proportion of their semi-arcs. The proportion will run: -- As the semi-arc of the Moon is to its cuspal distance, so is the semi-arc of Mars to its second distance. Nocturnal semi-arcs are used because the aspect is formed below the horizon.

$$\begin{aligned} & \text{☾ cuspal distance to 4<sup>th</sup> / ☾ nocturnal SA x ☿ nocturnal SA} \\ &= 11^{\circ} 23' / 66^{\circ} 30' \times 71^{\circ} 47' \\ &= 12^{\circ} 17' \end{aligned}$$

This shows that Mars must be 12° 17' below the cusp of the ascendant. But by Formula XIII Mars is found to be 23° 13' below that cusp at birth; therefore subtraction will give the arc of direction.

☿ below Asc. at birth	23° 13'
☿ 2 <sup>nd</sup> distance below Asc.	<u>12° 17'</u>
(23) ☿ ☐ ☾ mund. d.	<u>10° 56'</u>

Notice now that it is *not possible* to form further directions from this by addition, because the next aspect will compel Mars to rise above the ascendant, and then its diurnal SA must be used. This necessitates a second sum in proportion.

$$\begin{aligned} & \text{☾ dist from 4<sup>th</sup> / ☾ nocturnal SA x ☿ diurnal SA} \\ &= 11^{\circ} 23' / 66^{\circ} 30' \times 108^{\circ} 13' \\ &= 18^{\circ} 31' \end{aligned}$$

That is to say, Mars must be 18° 31' below the cusp of the twelfth house in order to be in mundane trine to the Moon. The distance of Mars at birth from the twelfth cusp must be found and 18° 31' subtracted from it.

## Alan Leo Primary Directions

	♄ distance below Asc.	23° 13'
	1/3 diurnal SA ♄	<u>36° 4'</u>
	♄ distance below cusp 12 <sup>th</sup>	59° 17'
	Subtract second distance ♄	<u>18° 31'</u>
(24)	♄ △ ♄ mund d.	40° 46'
	1/6 diurnal SA ♄	<u>18° 2'</u>
(25)	♄ ▢ ♄ mund. d.	58° 48'
	1/6 diurnal SA ♄	<u>18° 2'</u>
(26)	♄ ⋈ ♄ mund. d.	<u>76° 50'</u>

Direction (24) measures to age 40 years 9 months, and the other two directions are formed from it by adding proportional parts of the diurnal semi-arc of Mars.

The Sun, the Moon, or a planet can be directed to the aspect of its own place by taking proportional parts of its semi-arc, remembering in this case as in all others that when the direction carries the body directed across the line of the horizon the opposite semi-arc must be used.

One third of the Moon's semi-arc is 22° 10', which is the arc of ♄ ∞ ♄ mundane; for when the Moon has moved this distance to the east by axial rotation, it will be as far west of the third cusp as it was at birth from the fourth cusp. Other aspects can be formed from this by adding proportional parts of the semi-arc.

The case of the Sun is different; it is just above the cusp of the seventh, and direct motion will carry it into the sixth house. A sum in proportion is necessary here in order to find out how far it must be above the cusp of the sixth to form the direction ☉ ∞ ☉ mundane. As the Sun's diurnal SA is to its cuspal distance, so is its nocturnal SA to its second distance above the sixth cusp.

$$\begin{aligned}
 &\text{☉ above 7<sup>th</sup>$$

The Sun must be 1° 21' above the sixth cusp; so that its distance from this cusp must be ascertained and then this amount subtracted.

	☉ above 7 <sup>th</sup> cusp	1° 14'
	1/3 nocturnal SA	<u>31° 19'</u>
	☉ above 6 <sup>th</sup> cusp	32° 33'
	Subtract second distance	<u>1° 21'</u>
(27)	☉ ∞ ☉ mund. d.	<u>31° 12'</u>

Other directions can be formed from this by adding proportional parts of the nocturnal semi-arc.



## Alan Leo Primary Directions

### CONVERSE MUNDANE DIRECTIONS

With the exception of Mundane Parallels and Rapt Parallels, to be considered later, the directions in the previous section are all that are usually computed or admitted by most astrologers. In every one of them the directed body moves clockwise through the houses in accordance with axial rotation, so that they are all direct directions in reality, in spite of the fact that some workers, using a misleading and contradictory nomenclature, call those converse in which the Sun or Moon is directed to the aspect of a planet.

The question now arises whether it is possible for directions to be formed that are really converse, *i.e.* brought about by one of the heavenly bodies apparently moving anti-clockwise through the houses.

The problem of converse mundane directions to angles has been considered in the previous chapter, and the two theories advanced in explanation and justification of them have been given. Directions (11) to (18) were computed by way of illustration of them.

Converse directions between the heavenly bodies and converse directions to the angles stand or fall together. If the latter are possible, the former are possible also. If Uranus can apparently pass from its radical position just below the horizon down to the lower meridian, as directions (11) to (14) represent it doing, there is nothing to prevent it forming aspects to the Sun or the Moon or any other heavenly body while doing so. Or, to reverse the proposition, if it is impossible for Jupiter to move conversely and anti-clockwise to the conjunction with the Sun in the seventh house, directions (15) to (18) are impossible also. And yet although most astrologers today admit converse directions to angles, their inevitable corollary, converse directions between heavenly bodies, is ignored by almost every writer.

One or two practical examples will show how to work these directions, and will also show that for every direct arc between two heavenly bodies there is a corresponding converse one.

In directions (23) to (26) four mundane arcs were formed by Mars moving upwards through the first, twelfth, and eleventh houses to aspects of the Moon. If Mars is regarded as the fixed body, the Moon can conversely move through the fifth and sixth houses and form similar aspects to Mars. The formula will be: -- As the

## Alan Leo Primary Directions

SA of Mars is to its cuspal distance, so is the SA of the Moon to its second distance.

$$\begin{aligned} & \text{♂ distance above 2<sup>nd</sup> / ♂ nocturnal SA} \times \text{☾ nocturnal SA} \\ &= 0^\circ 43' / 71^\circ 47' \times 66^\circ 30' \\ &= 0^\circ 40' \end{aligned}$$

When the Moon is 0° 40' east of the fifth cusp it will be in converse mundane square to Mars.

1/3 SA ☾	22° 10'
MD ☾	<u>11° 23'</u>
☾ from 5 <sup>th</sup>	10° 47'
2 <sup>nd</sup> distance ☾	<u>0° 40'</u>
(28) ☾ □ ♂ mund. con.	10° 7'
1/3 SA ☾	<u>22° 10'</u>
(29) ☾ △ ♂ mund. con.	32° 17'
1/6 SA ☾	<u>11° 5'</u>
(30) ☾ ▢ ♂ mund. con.	43° 22'
1/6 SA ☾	<u>11° 5'</u>
(31) ☾ ⋈ ♂ mund. con.	<u>54° 27'</u>

Direction (28) shows the Moon just east of the fifth cusp; (29) shows it just below the sixth cusp; (30) just below the middle of the sixth; and (31) just below the seventh cusp.

Direct direction (23)	compares with converse direction (28)
" " (24)	" " " (29)
" " (25)	" " " (30)
" " (26)	" " " (31)

Jupiter directed to converse aspects of the Sun will give a series of directions corresponding to numbers (19) to (22). In this case Jupiter is the moving body and the Sun is regarded as fixed. The formula becomes: -- As the Sun's SA is to its cuspal distance so is Jupiter's SA to its second distance. The sextile will be formed when Jupiter is the second distance west of the fifth cusp. For the conjunction a second calculation is necessary, using Jupiter's diurnal SA. The following are the arcs of direction.

(32) ♃ * ☉ mund. con.	2° 39'	corresponding to (19)
(33) ♃ ∟ ☉ mund. con.	12° 30 ½'	corresponding to (20)
(34) ♃ ✕ ☉ mund. con.	22° 22'	corresponding to (21)
(35) ♃ ⋈ ☉ mund. con.	42° 53'	corresponding to (22)

It is unnecessary to give the working of these in full, as sufficient examples have been given in this chapter to enable the working to be understood.

It will be seen that while in some cases direct and converse directions do not differ very much in arc, in other instances the difference is considerable.

## **Alan Leo Primary Directions**

Because the converse directions have been omitted by most writers there is no general consensus of opinion as to their value; and until they have been more fully examined and considered it is impossible to say whether the majority of astrologers are in favour of them or against them. Many of the older writers ignored all converse directions, under the impression that their formation was contrary to nature and was impossible. This idea has now been practically abandoned, but the subject is still surrounded with a good deal of confusion; for few seem to have made up their minds upon the matter or to have realised how extensive a field it really covers when fully worked out.

## Alan Leo Primary Directions

### CHAPTER XXIV

#### MUNDANE PARALLELS AND RAPT PARALLELS

ANY two heavenly bodies are in mundane parallel when they are at distances from the meridian that are proportional to their semi-arcs. For instance, when the Moon by mundane motion passes over the fourth house, crosses the lower meridian, and then rises through the third house, it will presently reach a distance from the meridian similar to that of Jupiter at birth, and the two will be in mundane parallel. In order to decide how far the Moon must be distant from the meridian, a sum in proportion is necessary similar to those used in the last chapter. Jupiter is fixed and the Moon moves.

$$\begin{aligned} & 4 \text{ MD} / 4 \text{ nocturnal SA} \times \text{☾ nocturnal SA} \\ & = 17^\circ 55' / 59^\circ 9' \times 66^\circ 30' \\ & = 20^\circ 9' \end{aligned}$$

$$\begin{array}{rcl} & \text{☾'s MD} & 11^\circ 23' \\ & \text{☾'s 2<sup>nd</sup> MD} & \underline{20^\circ 9'} \\ (36) \quad \text{☾ P 4 mund. d.} & & 31^\circ 32' \end{array}$$

The Moon's first and second meridian distances must be added together because they are on opposite sides of the meridian.

*Required to find the arc of ☉ P ☿ mundane direct.* To form this the Sun must pass below the horizon until it reaches a distance from the lower meridian proportional to the two nocturnal semi-arcs.

$$\begin{aligned} & \text{☿ MD} / \text{☿ nocturnal SA} \times \text{☉ nocturnal SA} \\ & = 48^\circ 34' / 71^\circ 47' \times 93^\circ 57' \\ & = 63^\circ 34' \end{aligned}$$

$$\begin{array}{rcl} & \text{☉'s MD noct.} & 95^\circ 11' \\ & \text{☉'s 2<sup>nd</sup> MD} & \underline{63^\circ 34'} \\ (37) \quad \text{☉ P ☿ mund. d} & & \underline{31^\circ 37'} \end{array}$$

Many of these mundane parallels are at the same time either conjunctions or oppositions. For instance, if the moving Moon continues its eastward motion by which direction (36) was formed, it will rise up through the third and second houses and presently reach a distance from the meridian similar to that of Mars, when the two will be in mundane parallel; but they will also at the same time be in mundane conjunction. Similarly if the Moon is regarded as fixed and if Neptune rises up through the eleventh and tenth houses, it will reach a distance from the upper meridian proportional to that of the Moon from the lower meridian, and the two will be in mundane parallel; but they will also at the same time be in opposition.

## Alan Leo Primary Directions

### CONVERSE MUNDANE PARALLELS

The four previously mentioned mundane parallels are all formed by direct or clockwise motion through the houses in accordance with axial rotation. The question of the possibility of converse or anti-clockwise motion arises here just as it did in previous chapters. If such motion, or apparent motion, is possible, converse mundane parallels are also possible.

Assuming such apparently converse motion is possible, the Moon may pass back through the fifth and sixth houses (or rather seem to do so) and get into mundane parallel with Mars, thus:

$$\begin{aligned} & \text{♄ nocturnal MD} / \text{♄ nocturnal SA} \times \text{☾ nocturnal SA} \\ & = 48^\circ 34' / 71^\circ 47' \times 66^\circ 30' \\ & = 45^\circ 0' \end{aligned}$$

$$\begin{array}{ll} \text{☾'s 2<sup>nd</sup> MD} & 45^\circ 0' \\ \text{☾'s MD} & 11^\circ 23' \\ (38) \quad \text{☾ P ♄ mund. con.} & 33^\circ 37' \end{array}$$

The two bodies will be on opposite sides of the meridian, and the Moon will be 0° 40' inside the cusp of the sixth house at the time when the aspect is complete (or, rather, will seem to be there), so that it will be neither a conjunction nor an opposition.

Those who adopt the first of the two explanations of converse motion previously given when discussing converse mundane directions to angles would affirm this to be a parallel formed before birth and brought forward into the life history at a time according to its arc. It was actually formed rather more than two hours before birth.

Those who adopt the second of the two explanations would maintain that the point 45° 0' west of the lower meridian passes eastward by ordinary axial rotation until it reaches the mundane position occupied by the Moon at birth, and that this is how the parallel is really formed.

By a similar converse motion, Mars might pass back through the second and third houses until it forms the direction ♄ P ☾ mundane converse. And Uranus might from ♄ P ☾ mundane converse in the same way.

### RAPT PARALLELS

In mundane parallels and aspects, one of the bodies concerned is regarded as fixed and the other as moving. In rapt parallels, both the bodies move, and the parallel is complete when they are equal distances from the meridian in proportion to their semi-arcs. For

## Alan Leo Primary Directions

instance, in Mrs. Besant's horoscope, Mars rises up towards the cusp of the Ascendant and the Sun passes down below the cusp of the seventh house, and when they have reached distances from the meridian that are proportional to their semi-arcs the rapt parallel will be formed.

These are quite as truly mundane as those previously described which are called mundane parallels; but the name rapt parallels serves to distinguish them.

With rapt parallels one of the bodies is always approaching the meridian and the other is always receding from it. The one approaching the meridian is the one that is directed.

The following is the rule for calculating them. Add together the semi-arcs of the two bodies; then say – *As the sum of the two semi-arcs is to the semi-arc of the body directed, so is the difference between the RA of the two bodies to the second distance of the body directed.*

*Required the arc of ☉ rapt par. ☿.* The Sun is the body directed because it approaches the meridian, and its nocturnal SA must be used because it will be below the horizon.

$$\begin{array}{r} \text{☉'s SA} \quad 93^\circ 57' \\ \text{☿'s SA} \quad \underline{71^\circ 47'} \\ 165^\circ 44' \\ \text{divided by 2} \quad 82^\circ 52' \end{array}$$

$$\begin{array}{r} 46^\circ 58 \frac{1}{2}' / 82^\circ 52' \times 71^\circ 52' \\ = 40^\circ 44' \\ \times \underline{2} \\ 81^\circ 28' \quad \text{☉'s 2}^{\text{nd}} \text{ MD} \\ \underline{95^\circ 11'} \quad \text{☉'s 1}^{\text{st}} \text{ MD} \\ 13^\circ 43' \text{ difference equals } \text{☉ rapt parallel } \text{☿} \quad (39) \end{array}$$

$$\begin{array}{r} \text{☉'s SA} \quad 93^\circ 57' \\ \text{divided by 2} \quad 46^\circ 58 \frac{1}{2}' \end{array}$$

$$\begin{array}{r} \text{☉ RA} \quad 187^\circ 13' \\ - \text{☿ RA} \quad \underline{43^\circ 30'} \\ 143^\circ 45' \\ \text{divided by 2} \quad 71^\circ 52 \frac{1}{2}' \end{array}$$

Half of each quantity is used in the working and the product is doubled at the end. Half the sum of the semi-arcs of the Sun and Mars makes the first term; half the semi-arc of the Sun is the second term; and half the difference in RA is the third term.

The arc of direction is  $13^\circ 43'$  means that when the direction is complete the Sun will be this distance nearer the lower meridian and Mars will be the same distance further away from it; so that the second MD of the Sun will be  $81^\circ 28'$ , and that of Mars  $62^\circ 17'$ .

If any doubt should arise in the mind as to whether a rather involved calculation like this has been correctly performed, the result

## Alan Leo Primary Directions

can be tested by the rule-of-three; because the Sun's SA nocturnal must be to that of Mars as  $81^{\circ} 28'$  is to  $62^{\circ} 17'$ .  
Thus --

$$\begin{aligned} & \text{☉ nocturnal SA} / \text{☿'s nocturnal arc} \times \text{☿'s 2<sup>nd</sup> MD} \\ &= 71^{\circ} 47' / 93^{\circ} 57' \times 81^{\circ} 28' \\ &= 62^{\circ} 15' \end{aligned}$$

The result differs by two minutes of arc from the distance of Mars originally obtained, and the discrepancy is due to the fact that one or two small fractions of a minute have been ignored in the calculation; but this is sufficient to show that the arc of direction  $13^{\circ} 43'$  is correct.

It sometimes happens that the two bodies on opposite sides of the horizon, one above and the other below the earth, when the rapt parallel is complete, and then a slight modification of the preceding method is necessary.

*Required the arc of ☿ rapt parallel ☽.* When this is complete, Saturn will be in the eleventh house and the Moon in the second. Saturn will be as far distant from the upper meridian as the Moon is from the lower, in the proportion of Saturn's diurnal and the Moon's nocturnal semi-arc.

In such a case as this, when calculating the difference in RA, the opposition of the Moon must be used, which is obtained by adding  $180^{\circ}$  to the RA of the Moon in the Speculum; and then the difference taken between this and the RA of Saturn. But the Moon's nocturnal SA must be used.

$\begin{array}{r} \text{☿ SA} \quad 76^{\circ} 17' \\ \text{☽ SA} \quad \underline{66^{\circ} 30'} \\ \quad \quad \underline{142^{\circ} 47'} \\ \text{div by 2} \quad 71^{\circ} 23 \frac{1}{2}' \end{array}$	$\begin{array}{r} \text{☿ SA} \quad \underline{76^{\circ} 17'} \\ \text{div by 2} \quad 38^{\circ} 8 \frac{1}{2}' \end{array}$	$\begin{array}{r} \text{☿ RA} \quad 339^{\circ} 57' \\ \text{☽ ☉ RA} \quad \underline{283^{\circ} 27'} \\ \quad \quad \underline{56^{\circ} 30'} \\ \text{div by 2} \quad 28^{\circ} 15' \end{array}$
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$$\begin{aligned} & 38^{\circ} 8 \frac{1}{2}' / 71^{\circ} 23' \times 28^{\circ} 15' \\ &= 15^{\circ} 5 \frac{1}{2}' \\ &\times \quad \underline{2} \\ &30^{\circ} 11' \quad \text{☿ 2<sup>nd</sup> MD} \\ &\underline{67^{\circ} 53'} \quad \text{☿ 1<sup>st</sup> MD} \\ &37^{\circ} 42' \quad \text{difference equal ☿ rapt parallel ☽ (40)} \end{aligned}$$

Saturn is the one directed because it is approaching the meridian when the direction is complete, whereas the Moon, after having crossed the lower meridian, is receding from it in the second house.

## Alan Leo Primary Directions

### CONVERSE RAPT PARALLELS

On examination it will be seen that in directions (39) and (40) the bodies concerned are direct in motion moving clockwise in accordance with axial rotation. The problem of converse motion, however, obtrudes itself here just as it does elsewhere, and the question of whether it is possible to form rapt parallels by converse motion is forced upon our attention. There is no need to discuss the whole matter again under this heading; all that need be said is that if what appears to be converse motion is possible at all, as in the case of directions to angles, it carries with it the certainty that when a body appears to move conversely it must be able to form aspects and parallels of all kinds while so moving.

*Required the arc of ♄ rapt parallel ♃ converse.* When this is complete Saturn will be in the lower part of the first house, just above the cusp of the second, and the Moon will be in the sixth house, just above its cusp. The two bodies must both move conversely in order to get into these positions. Saturn is the planet directed because it applies to the meridian, and its nocturnal semi-arc must be used. Saturn's RA must be subtracted from that of the Moon, first adding 360° to the latter.

♄ SA n.	103° 43'		♄ SA 103°43' / 2		♃ RA	103° 27'
♃ SA n.	<u>66° 30'</u>		= 51° 51 ½'		add	<u>360°</u>
	<u>170° 13'</u>					463° 27'
div by 2	85° 6 ½'				- ♄ RA	<u>339° 57'</u>
						<u>123° 30'</u>
					div by 2	61° 45'

	51° 51 ½' / 85° 6 ½' x 61° 45'
=	37° 37 ½'
x	<u>2</u>
	75° 15' ♄ 2 <sup>nd</sup> MD
	<u>112° 7' ♄ 1<sup>st</sup> MD</u>
	36° 52' difference equals ♄ rapt parallel ♃ (41)

This means that Saturn will be 36° 52' nearer the lower meridian and the Moon the same distance further away from it. Saturn's lower MD will therefore be 75° 15', and that of the Moon 48° 15', when the parallel is complete; for these arcs are proportional to the two nocturnal semi-arcs. If these two secondary meridian distances are examined by means of the Formula for finding cuspal distances



### **Alan Leo Primary Directions**

it will be discovered that Saturn is 6° 6' above the cusp of the second house, and that the Moon is 3° 55' above the cusp of the sixth, when the direction is complete.

Several other converse rapt parallels are possible in this horoscope, but, in the light of what has gone before, no more need be given here.

## Alan Leo Primary Directions

### CHAPTER XXV

#### ZODIACAL DIRECTIONS TO THE ANGLES

THE difference between mundane and zodiacal directions lies in the fact that the former are based upon mundane aspects, whereas zodiacal directions depend upon aspects measured in the zodiac. For instance in Mrs. Besant's horoscope the Moon is at 12 ☾ 52, about half its house-space west of the cusp of the fourth house; and in order for Uranus to get into direct *mundane* trine with the Moon, the planet must rise across the ascendant and reach the middle of the twelfth house; but in order for it to reach the *zodiacal* trine of the Moon, Uranus must rise into the position that was occupied by 12 ☾ 52 at birth. Both movements are brought about by the same eastward axial rotation of the earth.

Zodiacal directions are classed as direct and converse just as are the mundane group; and the problem of what the converse really are arises here just as it did there.

#### DIRECT ZODIACAL DIRECTIONS TO THE MID-HEAVEN

To direct to the conjunction, aspect, or parallel of declination of any body, find the RA of that degree and minute of the zodiac where the conjunction, aspect, or parallel falls. The difference between this RA and the RA of the MC at birth is the arc of direction.

*Required the arc of MC & ♄ zod. direct.* Neptune is at 28 ♄ 0 and the RA of this point must be calculated in the usual way. The RA of the planet as given in the Speculum cannot be used the present purpose because in reckoning it latitude was taken into account, whereas in these zodiacal directions position on the ecliptic is considered without latitude. To work with the RA in the Speculum would constitute this a mundane direction.

## Alan Leo Primary Directions

By Formula I

$$\begin{aligned}\text{RA} &= \text{atan}(\tan(28^{\circ} 0') \times \cos(23^{\circ} 27')) \\ &= \text{atan}(-0.5733) \\ &= -29.82 + 360 \\ &= 330.17 \text{ or } 330^{\circ} 11'\end{aligned}$$

$$\begin{array}{rcl}\text{RA } \Psi & & 330^{\circ} 11' \\ - \text{RAMC} & & \underline{272^{\circ} 4'} \\ (42) \text{ MC } \oslash \Psi & & \underline{58^{\circ} 7'}\end{array}$$

The RA of  $28^{\circ} 0'$  is  $330^{\circ} 11'$ . The RA of the MC is  $272^{\circ} 4'$ . The difference is the arc of direction, and it measures to age 58 years 1 month.

In forming this direction,  $28^{\circ} 0'$  rises up to the meridian by the eastward axial rotation of the earth.

*Required the arc of MC  $\oslash$   $\zod$ . direct.* This aspect falls at  $18^{\circ} 25'$ . By Formula I: --

$$\begin{aligned}\text{RA} &= \text{atan}(\tan(18^{\circ} 25') \times \cos(23^{\circ} 27')) \\ &= \text{atan}(-2.7551) \\ &= -70.05 + 360 \\ &= 289.95 \text{ or } 289^{\circ} 57'\end{aligned}$$

In forming this direction  $18^{\circ} 25'$  passes across the fourth house on to the lower meridian by the eastward axial rotation of the earth.

*Required the arc of the MC par  $\mathfrak{D}$   $\zod$ . d.* The Moon's declination is  $17^{\circ} 35'$  and it is first necessary to find to what longitude this declination corresponds. By Formula IV: --

$$\begin{aligned}\text{Longitude} &= \text{asin}(\sin(17^{\circ} 35') / \sin(23^{\circ} 27')) \\ &= \text{acos}(0.7591) \\ &= 40.61 \text{ or } 40^{\circ} 37'\end{aligned}$$

This means that declination  $17^{\circ} 35'$  corresponds to longitude  $40^{\circ} 37'$  reckoned from the first point of Cancer or Capricorn; and as the MC here is Capricorn, it will fall at  $10^{\circ} 37'$ . The RA of this point is then found, in the same way as in the two previous examples, to be  $43^{\circ} 4'$  from  $\mathfrak{Z}$  or  $313^{\circ} 4'$  from  $\mathfrak{P}$ .

$$\begin{array}{rcl}\text{RA corresponding to declination} & & 313^{\circ} 4' \\ \text{RA of MC} & & \underline{272^{\circ} 4'} \\ (44) \text{ MC par } \mathfrak{D} \text{ } \zod. \text{ d.} & & \underline{41^{\circ} 0'}\end{array}$$

In forming this direction  $10^{\circ} 37'$  passes up on to the meridian.

## Alan Leo Primary Directions

### CONVERSE ZODIACAL DIRECTIONS TO THE MID-HEAVEN

*Required the arc of MC ☊ ☊ zod. con.* The opposition of Mars is at 15 ♍ 12. By Formula I: --

$$\begin{aligned} \text{RA} &= \text{atan}(\tan(15^\circ 12') \times \cos(23^\circ 27')) \\ &= \text{atan}(0.9238) \\ &= 42.73 + 180 \\ &= 222.73 \text{ or } 222^\circ 43' \end{aligned}$$

RAMC	272° 4'
RA 15♍12	<u>222° 43'</u>
(45) MC ☊ ☊ zod. con.	<u>49° 22'</u>

The same two explanations of converse directions that have previously been given when considering mundane directions to angles are advanced here again.

The first explanation is that 15 ♍ 12 was actually on the cusp of the mid-heaven a little more than three hours before birth, and that this is a pre-natal influence acting after birth.

The second explanation is that the degree and minute on the cusp of the mid-heaven at birth pass across the ninth and eighth houses by the eastward axial rotation of the earth until they reach the position that was occupied by 15 ♍ 12 at birth.

*Required the arc of MC par ☊ zod. con.* The calculation performed under direction (44) shows that the Moon's declination 17° 35' corresponds to longitude 40° 37' from Capricorn or 49° 23' from Libra, which latter is 19 ♍ 23. The RA of this point is found by Formula I to be 226° 56'.

RA of MC	272° 4'
subtract	<u>226° 56'</u>
(46) MC par ☊ zod. con.	<u>45° 8'</u>

### DIRECT ZODIACAL DIRECTIONS TO THE ASCENDANT

The Ascendant is always directed by Oblique Ascension. Formula VI shows that the Oblique Ascension of the Ascendant is obtained by adding 90° to the RA of the MC.

The rule for directing the Ascendant to any point, whether direct or converse, is as follows: -

Firstly, by Formula I find the RA of the degree and minute of longitude to which the Ascendant is to be directed.

Secondly by Formula III find the declination of that longitude.

## Alan Leo Primary Directions

Thirdly, by Formula V find the Ascensional Difference of that declination at the latitude of the birthplace.

Fourthly, by Formula VI find the Oblique Ascension of the degree and minute of longitude; having already found its RA and Ascensional Difference.

Lastly, the difference between the Oblique Ascension of the Ascendant and that of the point where the aspect falls is the arc of direction.

When directing the Ascendant to the conjunction of a planet, that planet's declination and RA as given in the Speculum must not be used. Instead, the declination and RA of the degree and minute of longitude where the planet is situated without latitude must be computed and used. This is illustrated in the following direction.

*Required the arc of Asc  $\sigma$  8<sup>th</sup> zod. d.* The longitude is 16 $^{\circ}$  37'. The RA of this point is 15 $^{\circ}$  19', and its declination is 6 N 32. The Ascensional Difference of this declination for the latitude of London, 51 $^{\circ}$  32', is 8 $^{\circ}$  17', which makes the Oblique Ascension 7 $^{\circ}$  2'. From this is subtracted the OA of the ascendant, 2 $^{\circ}$  4' is 14 $^{\circ}$  39' which leaves the arc of the direction Asc.  $\sigma$  8<sup>th</sup> zod. d. as 4 $^{\circ}$  58' (47).

Mrs. Besant's father died at this time.

*Required the arc of Asc par  $\sigma$  7<sup>th</sup> zod. d.* The declination of Mars is 13 $^{\circ}$  57' N., which by Formula IV corresponds to longitude 7 $^{\circ}$  17'. The RA of this is 34 $^{\circ}$  56', its Asc. Diff. 18 $^{\circ}$  13', and its OA 16 $^{\circ}$  43'. The difference between this and the OA of the ascendant 2 $^{\circ}$  4' is 14 $^{\circ}$  39' which is the arc of direction Asc par.  $\sigma$  7<sup>th</sup> zod. d. (48).

## CONVERSE ZODIACAL DIRECTIONS TO THE ASCENDANT

These are worked in a similar way to the direct directions. The difference between the Oblique Ascension of the ascendant and the Oblique Ascension of the degree and minute of longitude where the aspect falls is the arc of direction.

Converse directions to the angles are admitted now by all astrologers, and nothing need be added here to what has been said on the subject previously.

*Required the arc of Asc  $\sigma$  5<sup>th</sup> zod. con.* The longitude of Saturn is 7 $^{\circ}$  28', the RA of which is 339 $^{\circ}$  10', and the declination 8 $^{\circ}$  46' S. Its Asc. Diff. is 11 $^{\circ}$  12', and its OA 350 $^{\circ}$  22'. The difference

## Alan Leo Primary Directions

between this and the OA of the Ascendant,  $362^{\circ} 4'$ , is  $11^{\circ} 42'$ , which is the arc of direction Asc  $\propto 5$  zod. con. (49)

*Required the arc of Asc  $\propto 4$  zod. con.* The opposition of Jupiter falls at 18  $\propto$  25, the RA of which is  $289^{\circ} 57'$  and its declination  $22^{\circ} 11'$ . Its Asc. Diff. is  $30^{\circ} 53'$ , and its OA  $320^{\circ} 50'$ . The difference between this and  $362^{\circ} 4'$ , the OA of the Ascendant is  $41^{\circ} 14'$ , which is the arc of direction, Asc  $\propto 4$  zod. con. (50).

## Alan Leo Primary Directions

### CHAPTER XXVI

#### ZODIACAL DIRECTIONS BETWEEN SUN, MOON, AND PLANETS WITHOUT LATITUDE

WHEN taken in the ecliptic, without latitude, the directions of Sun, Moon and planets are all calculated the same way; whether the Sun is directed to the Moon or to a planet, whether the Moon is directed to a planet, or one planet is directed to another.

These directions, like the others in the Primary system, are divided into direct and converse; but an important difference has to be noticed here. In all the various kinds of directions that have been included in previous chapters – mundane directions to angles, mundane directions between the heavenly bodies, and zodiacal directions to angles-- a direct direction has been one in which the body moving, or apparently moving, passed through the houses clockwise, under the influence of the earth's axial rotation, as from the first house to the twelfth; and a converse direction has been one in which it apparently moved anti-clockwise, as from the twelfth house to the first.

This system of defining and naming directions is dropped by all astrologers when dealing with the zodiacal group, and a different one is employed based upon apparent motion in the zodiac. When the body directed moves, or rather seems to move in the order of the signs, as from Aries to Taurus, the direction is called direct; but when it appears to move in the opposite order to the signs, as from Aries to Pisces, it is called converse.

At first glance this will probably seem to many readers a reasonable system to adopt, that direct zodiacal directions should follow the order of the signs; but it has really been the cause of serious misunderstanding and confusion, and is open to strong objection. It seems to imply that in a primary zodiacal direction, the body directed moves along the ecliptic until it reaches the degree and minute to which it is directed. For instance, that when the Sun at 7  $\Omega$  54 is directed to the direct zodiacal conjunction with Mercury at 16  $\Omega$  40, the luminary moves towards

## Alan Leo Primary Directions

the latter place in much the same way as it would do in a Secondary direction.

### CONVENTIONAL NOMENCLATURE MISLEADING

Those who have considered carefully the preceding chapters will see that this is not a correct account of what really happens when such a direction is formed. If the proposition be true that all Primary Directions are completed within a few hours after birth, such zodiacal motion is impossible in the Primary system. What really takes place is that, by the eastward axial rotation of the earth, 16 ♎ 40 moves downwards until it reaches a similar distance from the meridian that [was] held by 7 ♎ 54 at birth in the proportion of their semi-arcs.

So that to call ♉ ♂ 8 zod. a direct direction is double misleading; for it implies, firstly, that there is a zodiacal motion, which is untrue; and secondly, that the Sun moves towards Mercury, which is also untrue, seeing that it is Mercury which moves towards the place of the Sun.

The only difference between mundane and zodiacal directions is that the former are based upon mundane aspects and the latter upon zodiacal. Both are brought about by the eastward axial rotation of the earth (with the possible exception of mundane converse directions, on which, as previously remarked, the astrological world is not yet agreed).

The misleading nature of the ordinary method of naming Primary zodiacal directions does not end even here. If we take such a direction as ♉ ♂ 8 zod. con. and analyse it, we notice that the Sun appears to move back to 16 ♎ 37, and that the direction is called converse because this contrary to the order of the signs. What really happens is that the place of the Sun 7 ♎ 54, moves directly by axial rotation towards the position that was occupied at birth by 16 ♎ 37. Judged by the only true standard, that of mundane motion resulting from axial rotation, the movement is direct or clockwise; whereas by the conventional system it is called converse. So that this arbitrary nomenclature is the reverse of the truth; it inverts completely the true motion.

Direct and converse zodiacal directions are both of them direct, the one as much as the other, when judged by the standard of axial rotation.

This system of naming directions, however, is so widely spread



## Alan Leo Primary Directions

and so old established that it would be a very difficult task to introduce any other. Accordingly where the terms *zodiacal*, *direct* and *converse* are used here they will be employed in the conventional sense of apparent motion in the zodiac, but in the light of what has been said no misunderstanding should arise as to what these directions really are or how they are brought about.

### RULE FOR CALCULATION ZODIACAL DIRECTIONS

When one heavenly body is directed to another, one of them must necessarily be in advance of the other, in the sense that by the earth's axial rotation it will come to the cusp of the next angle sooner than the other. For instance, in the direction  $\odot \square \text{♅}$  zod. direct, the Sun is at  $7 \text{ } \Omega \text{ } 54$  and the place of the aspect is at  $7 \text{ } \text{♊} \text{ } 28$ . The Sun is in advance because, by axial rotation, it will arrive at the next angle, the seventh cusp, before the place of the aspect will do so. In the direction  $\odot \text{ } \text{ } \text{♄}$  zod. con., the Moon is in advance because it will reach the cusp of the next angle, the fourth cusp, before the Sun. In the direction  $\text{♄} \text{ } \text{ } \text{♅}$  zod. con., Saturn is in advance because it will reach the MC before Uranus. In  $\text{♄} \text{ } \Delta \text{ } \odot$  zod. con., the place of the aspect,  $7 \text{ } \Pi \text{ } 54$ , is in advance because it will reach the next angle, the ascendant, before the Moon.

If that which is in advance in this sense is called the *preceding*, and if the other is called the *succeeding*, it will be noticed that all zodiacal directions between two heavenly bodies, whether direct or converse, and whether with or without latitude, are formed by the succeeding body or point moving towards the preceding one by axial rotation.

In  $\odot \square \text{♅}$  zod. d.,  $7 \text{ } \text{♊} \text{ } 28$  moves down to the place of the Sun.

In  $\odot \text{ } \text{ } \text{♄}$  zod. con., the place of the Sun moves down towards the place of the Moon.

In  $\text{♄} \text{ } \text{ } \text{♅}$  zod. con., the place of Uranus moves up towards the place of Saturn.

In  $\text{♄} \text{ } \Delta \text{ } \odot$  zod. con., the place of the Moon moves eastward towards the place that was occupied at birth by  $7 \text{ } \Pi \text{ } 54$ .

Using the terms *preceding* and *succeeding* in the sense here described, the rule for calculating any of these directions is as follows: -- *As the semi-arc of the preceding body or point is to its meridian distance, so is the semi-arc of the succeeding body or point to its second distance.*

## Alan Leo Primary Directions

The sum or difference of the first and second distances of the succeeding body or point will be the arc of direction. If the succeeding body crosses the meridian to form the aspect, as it would do in  $\text{♄} \Delta \text{♌}$  zod. con., its first and second distances must be added together. If the succeeding body does not cross the meridian to form the aspect, as in  $\text{♌} \text{♋} \text{♄}$  zod. con., the difference between its first and second distances will give the arc of direction.

In order to tell whether to use diurnal or nocturnal semi-arcs and meridian distances, always use that which belongs to the preceding point according to its position in the horoscope; if this is diurnal, all must be diurnal; if it is nocturnal, all must be nocturnal. When any change of SA or MD from nocturnal to diurnal or *vice versa* takes place, it is the succeeding one that changes.

### EXAMPLES OF DIRECT ZODIACAL DIRECTIONS

*Required the arc of*  $\text{♌} * \text{♋}$  *zod. d.* The place of this aspect falls at  $7^\circ 28'$ . Its RA, MD, and SA must be computed in the ordinary way by means of the Formulae, as illustrated in the chapter on the Speculum, remembering that this longitude is taken without latitude.

The RA of  $7^\circ 28'$  is  $278^\circ 8'$ . Its MD is  $6^\circ 4'$  east of the meridian. Its SA diurnal is  $57^\circ 18'$ . Then by proportion: --

$$\begin{aligned} & \text{♌ diurnal MD} / \text{♌ diurnal SA} \times \text{SA of } 7^\circ 28' \\ &= 84^\circ 49' / 86^\circ 3' \times 57^\circ 18' \\ &= 56^\circ 29' \\ & \begin{array}{rcl} \text{MD of } 7^\circ 28' & & 6^\circ 4' \\ 2^{\text{nd}} \text{ MD} & & \underline{56^\circ 29'} \\ (51) \text{ } \text{♌} * \text{♋} \text{ zod. d.} & & \underline{62^\circ 33'} \end{array} \end{aligned}$$

The formula here becomes: -- As the Sun's SA (the preceding point) is to its MD, so is the SA of  $7^\circ 28'$  (the succeeding point) to its second MD.

The first and second distances of the place of the aspect are added together because they are on opposite sides of the upper meridian. Diurnal semi-arcs and distances are used because the preceding place (the Sun) is diurnal.

*Required the arc of*  $\text{♄} \text{♋} \text{♄}$  *zod. d.* The place of the opposition is  $28^\circ 0'$ . Its RA is  $150^\circ 11'$ , its MD  $58^\circ 7'$ , its SA  $74^\circ 15'$ . The preceding place is that of the Moon, and the formula is: -- As the Moon's SA is to its MD, so is the SA of the place of the aspect to its second distance. The difference of the first and second distances

## Alan Leo Primary Directions

of the place of the aspect, because they are on the same side of the meridian, gives the arc of direction  $45^{\circ} 25'$ .

$$\begin{aligned} & \text{☿ nocturnal MD} / \text{☿ nocturnal SA} \times \text{aspect SA} \\ &= 11^{\circ} 23' / 66^{\circ} 30' \times 74^{\circ} 15' \\ &= 12^{\circ} 42' \end{aligned}$$

1 <sup>st</sup> MD	58° 7'
2 <sup>nd</sup> MD	<u>12° 42'</u>

(52) ☿ ☽ ♀ zod.d. 45° 25'

*Required the arc of ☿ ☽ ♀ zod. d.* The place of the opposition is 7 ♉ 28. Its RA is  $159^{\circ} 10'$ , its MD  $67^{\circ} 6'$ , its SA  $78^{\circ} 48'$ . The preceding place is that of Jupiter; the succeeding place is 7 ♉ 28. The formula is: -- as Jupiter's SA is to its MD so is the SA of the place of the aspect to its second distance. The difference between the first and second distances, because they are on the same side of the meridian, gives the arc of direction.

$$\begin{aligned} & \text{♃ nocturnal MD} / \text{♃ nocturnal SA} \times \text{aspect SA} \\ &= 17^{\circ} 55' / 59^{\circ} 9' \times 78^{\circ} 48' \\ &= 23^{\circ} 52' \end{aligned}$$

1 <sup>st</sup> MD	67° 6'
2 <sup>nd</sup> MD	23° 52'

(53) ♃ ☽ ♀ zod.d. 43° 14'

## EXAMPLES OF CONVERSE ZODIACAL DIRECTIONS

*Required the arc of ☉ ☿ ♃ zod. con.* The preceding place is 18 ♊ 25, considered as a point on the ecliptic without latitude. The succeeding place is that of the Sun, which moves down to the preceding place along its nocturnal SA by direct axial rotation. The RA of 18 ♊ 25 is  $109^{\circ} 57'$ , its MD is  $17^{\circ} 53'$ , and its SA  $59^{\circ} 7'$ . The formula is: -- As the SA of the place of the aspect is to its MD so is the Sun's nocturnal SA to its second distance. The difference between the Sun's lower MD and its second distance gives the arc of direction.

$$\begin{aligned} & \text{Aspect MD} / \text{Aspect SA} \times \text{☉ nocturnal SA} \\ &= 17^{\circ} 53' / 59^{\circ} 7' \times 93^{\circ} 57' \\ &= 28^{\circ} 25' \end{aligned}$$

1 <sup>st</sup> MD	95° 11'
2 <sup>nd</sup> MD	<u>28° 25'</u>

(54) ☉ ☿ ♃ zod. con. 66° 46'

*Required the arc of ☿ ♀ ☽ zod. con.* The declination of Mars is  $13^{\circ} 57'$ , which by Formula IV is found to fall at 7 ♋ 17. The RA of this place is  $34^{\circ} 56'$ , its MD is  $57^{\circ} 8'$ , and its SA  $71^{\circ} 47'$ . The preceding place is 7 ♋ 17 and the succeeding place is the place of the Moon, which crosses the lower meridian by direct axial rotation and moves towards the former place. The formula is: -- As the SA of 7 ♋ 17 is to its MD, so is the Moon's SA to its second distance. The

## Alan Leo Primary Directions

first and second distances of the Moon are added because they are on opposite sides of the meridian.

$$\begin{aligned} & \text{MD of par.} / \text{SA of par} \times \text{☾ nocturnal SA} \\ &= 57^\circ 8' / 71^\circ 47' \times 66^\circ 30' \\ &= 52^\circ 56' \end{aligned}$$

☾ 2 <sup>nd</sup> Distance	52° 56'
☾ 1 <sup>st</sup> Distance	<u>11° 23'</u>
(55) ☾ ☿ zod. con.	<u>64° 19'</u>

*Required the arc of ☿ ☾ zod. con.* The aspect falls at 12 ☾ 52, and Saturn's place moves up to this, apparently in the converse order of the signs, but really as the result of the direct rotation of the earth. The RA of the place of the aspect, which is also the preceding place, is 283° 59', its MD 11° 55', and its SA 58° 0'. As the SA of 12 ☾ 52 is to its MD so is the SA of Saturn to its second distance.

$$\begin{aligned} & \text{MD of aspect} / \text{SA of aspect} \times \text{☿ diurnal arc} \\ &= 11^\circ 55' / 58^\circ 0' \times 76^\circ 15' \\ &= 15^\circ 41' \end{aligned}$$

1 <sup>st</sup> MD ☿	67° 53'
2 <sup>nd</sup> MD ☿	<u>11° 23'</u>
(56) ☿ ☾ zod. con.	<u>52° 12'</u>

When one planet is directed to another, the conjunction and opposition are for the most part the only aspects that are worth calculating; the lesser aspects do not have much effect.

## Alan Leo Primary Directions

### CHAPTER XXVII

#### ZODIACAL DIRECTIONS BETWEEN SUN, MOON, AND PLANETS WITH LATITUDE

THE previous chapter dealt with zodiacal directions considered as measured on the ecliptic without latitude; the problem of how to compute them when latitude is taken into account is one on which a good deal more division of opinion exists than a student might suppose from a perusal of the published books on the subject. Two methods have been recommended.

If we turn back to direction (52) ♄ ♂ ♀ zod. d. by way of practical illustration, in order to form this direction *with latitude*, the first method and probably the one most widely followed is to ascertain from the ephemeris what latitude and declination the Moon will have when it next arrives at the place of the opposition, 28 ♄ 0. Knowing longitude, latitude, and declination calculate the Moon's RA by Formula XII, and then its MD and SA in the usual way. The rule for finding the arc of direction by proportion is then applied in exactly the same way as directions without latitude.

The second method is not so widely practised and appears to be quite unknown to many students. It consists in employing the same amount of latitude which the body directed had at birth. For instance, in Mrs. Besant's horoscope the Moon had 5° 17' south latitude at birth, and this amount would be incorporated as a factor in the RA, the declination, and the SA every time it is desired to direct the Moon with latitude.

#### SOME OBJECTIONS

Both these methods have been criticised, and the first in particular has aroused much hostile comment.

On turning to the ephemeris it will be seen that the Moon reached 28 ♄ 0, the opposition of Neptune, on October 5<sup>th</sup>, 1847 *four days after birth*. It is argued that if it is legitimate to import into the process of calculation a factor that did not exist until four days after birth, it is obviously fatal to the claim so often made that Primary directions are all completed within a few hours after birth.

This illustration is only a mild one; others much more serious can be given.

## Alan Leo Primary Directions

If direction (53) is taken with latitude,  $4^{\circ} 5'$  zod. d., Jupiter did not reach the place of the opposition,  $7^{\circ} 11'$  28, so as to have the latitude that belonged to it, until 16<sup>th</sup> September, 1849, *two years after birth*.

If such a direction as  $8^{\circ} 1'$  zod. d. is taken with latitude Neptune did not reach the place of the aspect until 1867, *nearly twenty years after birth*.

Even these are only trifles when compared with some of the converse directions with latitude.

If  $8^{\circ} 1'$  zod. con., a direction formed very early in life, is taken with latitude, we are faced with two alternatives. The aspect falls at  $12^{\circ} 52'$ , and, in order to ascertain the latitude that belongs to Uranus when here, it is necessary either to go back to 11<sup>th</sup> March 1847, *six and a half months before birth*, or forward to 1929, *eighty-two years after birth*. To adopt the former alternative is to admit that converse directions are really pre-natal. To adopt the latter is absurd, because this direction is formed in early childhood.

In the case of  $\Psi^{\circ} 1'$  zod. con. with latitude, the two possible dates are, December 1826, *twenty-two years before birth*, and the year 1990, *one hundred and forty-three years after birth*, both of which are absurd.

If the proposition is true that Primary directions are completed within a few hours of birth, -- and, at the rate of  $1^{\circ}$  of RA for each year, a life of ninety years would take only six hours of sidereal time, -- no very appreciable change of latitude is possible, not much change of declination, and very little change of longitude, even for the Moon, the fastest moving body, and practically none for the planets.

If, on the other hand, we admit change of latitude to a greater extent than is justified by the time that has elapsed since birth (at the rate of  $1^{\circ}$  of RA = 4 mins. = 1 year of life), it is obviously necessary to abandon the idea that Primary directions are completed within a few hours of birth, for it is then untrue. While to assert this in the case of directions without latitude and to abandon it when calculating those with latitude is equivalent to dividing Primary directions into two different and irreconcilable systems.

## ANSWERS TO THE OBJECTIONS

These are some of the objections that have been advanced, and they have had different effects with different students. Some reject

## Alan Leo Primary Directions

directions with latitude altogether, and affirm that only those to points on the ecliptic without latitude are valid. Others admit directions with change of latitude to any extent, and maintain that the idea of Primary directions being formed within a few hours after birth is an illusion, and that their formation really extends over as long a period as is the case with Secondary directions. Others again, acknowledge directions with change of latitude when direct but deny them when converse. Yet others follow the second of the two methods previously mentioned; disallowing any change of latitude and always using the longitude to which the aspect measures the same latitude that the body directed had at birth.

There is certainly something to be said in favour of this second method, for apparently it is the only one capable of being reconciled with the statement that Primary directions are all complete within a few hours of birth.

As pointed out in a previous chapter, the positions in the horoscope of birth are regarded as persisting unaltered for the whole of life, so far as the native is concerned. If he was born at sunrise, he is a sunrise type of man all his life. If a given degree of longitude was rising at birth, good and bad transits will prove the importance of that degree all through life. Birth positions remain so long as life continues. Longitude, declination, latitude, and mundane position continue unchanged so far as the horoscope of birth is concerned.

The modifications we call directions are subordinate changes taking place within the changeless framework of the horoscope. A secondary, moving, changing horoscope is superposed upon that which was made permanent at birth. In such a direction as  $\text{♄ } 0^\circ \text{ } \Psi \text{ zod.}$ , no change takes place in either the latitude, longitude, or declination of the Moon; what happens is that  $28^\circ \text{ } 0'$  is brought eastward by axial rotation until it occupies a position from the lower meridian similar to the position of the Moon at birth in the proportion of the two semi-arcs. The problem really is this: -- when computing the RA, declination, oblique ascension, MD and SA of  $28^\circ \text{ } 0'$ , is it to be treated as a point on the ecliptic only and nothing more; or as having the same latitude the Moon had at birth; or as having that latitude which the Moon acquired when it reached this longitude by secondary progression after birth?

### EXAMPLE

Because these directions, except for the fact that they include

## Alan Leo Primary Directions

latitude, are calculated exactly the same way as those without latitude, one illustration of each method will be sufficient.

*Required the arc of  $\mathfrak{D} \circ \Psi$  zod. d. with the latitude given in the Ephemeris.* The Moon reached 28  $\mathfrak{Q}$  0 on 5<sup>th</sup> October 1847 at 8.55 am. Its latitude was then 3° 32' S. With this latitude the RA will be 148° 57'; the MD 56° 53'; the declination 8° 53'; the Ascensional Difference 11° 21'; the SA 78° 39'; and finally the arc of direction 43° 25'. (57)

*Required the arc of  $\mathfrak{D} \circ \Psi$  zod. d. with the latitude at birth.* The Moon's latitude at birth was 5° 17' S., and if this is considered as remaining unaltered, the RA<sup>5</sup> of 28  $\mathfrak{Q}$  0 will be 148° 21'; its MD 56° 17'; its declination 7° 13' N.; its Ascensional Difference 9° 10'; and its SA 80° 50'. Then by a proportion similar to that of direction (52) the second distance is 13° 50', and the arc of direction is 42° 27'. (58)

Directions (52), (57) and (58) may be compared with each other. The first is reckoned without latitude and is accepted by all. the last two are reckoned with latitude, and astrologers are not agreed with regard to them.

## TRUE ZODIACAL CONVERSE DIRECTIONS

In previous chapters the problem presented itself of mundane directions apparently formed before birth, and some examples were given. It will be seen that up to the present there has been nothing answering to these among the zodiacal directions between Sun, Moon, and planets; what are conventionally called direct and converse zodiacal directions can both be explained as the result of the earth's direct eastward axial rotation.

In order to form zodiacal directions that are really converse in the sense of being formed in the contrary way to those that are called direct, it would be necessary to reverse the rules. It is not proposed to give here any lengthy argument on the subject; one simple example will be sufficient for those who have followed carefully the explanations given in this and previous chapters.

In direction (52) the arc of  $\mathfrak{D} \circ \Psi$  zod. d. was calculated. In this the Moon looks as if [it] travelled along the zodiac until it reached 28  $\mathfrak{Q}$  0, the place of the opposition. What really happens is that 28  $\mathfrak{Q}$  0 passes down eastwards by direct axial rotation until it reaches a distance from the meridian similar to that of the Moon in

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5 By Formula XI



## Alan Leo Primary Directions

the proportion of the two semi-arcs. The Moon's SA and MD are taken as the standards of comparison, and the formula is: -- As the Moon's SA is to its MD so is the SA of 28 0 to its second distance. The preceding place is that of the Moon and the succeeding that of the opposition.

In order to form the same direction conversely in the sense of reversely, all the rules must be reversed. The SA and MD of Neptune are taken as the standards of comparison, and the place of the Moon, with or without latitude, is imagined as passing up westward through the fifth house until it reaches a distance from the meridian similar to that of Neptune in the proportion of the two semi-arcs. The opposition of the Moon's place would be used in practise, and this would pass down through the eleventh house toward Neptune. This cannot happen unless the earth is depicted as reversing the direction of its rotation and re-assuming pre-natal positions. The preceding place will then be that of Neptune, and the succeeding that of the Moon's opposition, and the formula will be: -- As the SA of Neptune is to its MD, so is the SA of the Moon's opposition, 12 52, to its second distance.

The following are the elements of the direction, taken without latitude. The RA of 12 52 is 283° 59'; its MD 11° 55'; its SA 58° 0'.

$$\begin{aligned} & \Psi \text{ diurnal arc} / \Psi \text{ diurnal SA} \times \text{aspect SA} \\ &= 58^\circ 19' / 73^\circ 29' \times 58^\circ 0' \\ &= 46^\circ 2' \end{aligned}$$

2 <sup>nd</sup> MD aspect	46° 2'
1 <sup>st</sup> MD aspect	<u>11° 55'</u>
(59) ☿♂Ψ zod. rev.	<u>34° 7'</u>

This can be compared with (52). 'Reverse' is probably a better term for such a direction, to avoid confusion with 'converse' when used in its conventional sense.

So far as is known, none of the Reverse directions have been calculated by astrologers, so that no experience is yet available to decide whether they have any value. They are only mentioned here in order to complete the subject.

## CALSSIFICATION OF DIRECT DIRECTIONS

The question now arises as to how many aspects of one kind it is possible to compute between two heavenly bodies. Taking the opposition of the Moon and Neptune by way of illustration, and omitting all 'reverse' directions, the following can all be accounted for by the direct eastward axial rotation of the earth.

## Alan Leo Primary Directions

- (a)  $\Psi \circ \text{D}$  mundane direct. The place of Neptune rises through the eleventh and tenth houses to meet the mundane opposition of the Moon.
- (b)  $\text{D} \circ \Psi$  zod. d. without latitude. The same motion takes place; the aspect is zodiacal, and the opposition of Neptune is taken as a point on the ecliptic without latitude.
- (c)  $\text{D} \circ \Psi$  zod. d., with latitude. The same motion takes place; the aspect is zodiacal, and the opposition of Neptune is taken with the latitude of the Moon will have when it gets there (or with the latitude of the Moon had at birth, according to the method adopted).
- (d)  $\Psi \circ \text{D}$  zod. con., without latitude. The same motion takes place; Neptune with the latitude it had at birth rises to the zodiacal opposition of the Moon taken as a point on the ecliptic without latitude.
- (e)  $\Psi \circ \text{D}$  zod. con. with latitude. The same motion takes place; Neptune with the latitude it had at birth rises to the zodiacal opposition of the Moon taken with the latitude Neptune had when there (or with the latitude Neptune had at birth, according to the method adopted).

Classes (a), (b), and (d) are accepted by all astrologers, so far as is known. Class (c) is accepted by most astrologers although not by all, and they differ regarding the method to be used. Class (e) is rejected or ignored by most astrologers, but is accepted by those who employ the second of the two methods of directing with latitude.

The mere fact that so many classes are possible will be sufficient to arouse a feeling of scepticism in most minds, and it certainly proves that the science of Primary directing has not yet reached finality.

NOTE. -- Since the above classification of direct directions was made a critical reader has argued that if it is legitimate to treat the Moon or any other body having latitude as if it had none, but was a mere point on the ecliptic, it must also be legitimate to direct this lunar ecliptic point to any other point. This would add a sixth class to the five just given.

(f)  $\text{D} \circ \Psi$  zod. both without latitude. The same motion as before takes place,  $28 \text{ }^\circ 0'$  (the opposition of Neptune), treated as without latitude, passes eastward to the mundane position occupied at birth by  $12 \text{ }^\circ 25'$  also taken without latitude.

If classes (b) and (a) are admitted, it is difficult to see why their combination in class (f) should be excluded.

## CHAPTER XXVII

### ON EQUATING ARCS OF DIRECTION. MEASURES OF TIME.

WHEN the arc of direction has been ascertained, it is always expressed in equatorial degrees and minutes, *i.e.* in Right Ascension. This arc really shows how many degrees pass across the meridian while the direction is in process of formation. It is then necessary to know at what period of life the direction will produce its effect; we must be able to equate the degrees and minutes of arc with years and months of life. A variety of methods of doing this have been suggested at different times and the following is a summary of the most important.

#### 1. PTOLEMY'S METHOD

In this method each degree of RA measures one year of life. This is the simplest and most widely used of all, and is the one we have employed in the preceding chapters. The student will do well to follow it.

#### II. NAIBOD'S METHOD

Here, each degree of RA measures one year, five days, eight hours; and each minute of arc, six days four hours. Put differently, the mean daily motion of the Sun represents one year of life. Hence we get the following table.

## Alan Leo Primary Directions

### NAIBOD'S TABLE OF THE MEASURE OF TIME

<i>Measure of Time for Degrees</i>			<i>Measure of Time for Minutes</i>		
°	Yrs.	Days	°	Yrs.	Days
0	0	0	30	30	160
1	1	5	31	31	166
2	2	10	32	32	171
3	3	16	33	33	177
4	4	21	34	34	181
5	5	26	35	35	186
6	6	32	36	36	192
7	7	37	37	37	197
8	8	43	38	38	202
9	9	48	39	39	208
10	10	53	40	40	213
11	11	59	41	41	218
12	12	64	42	42	224
13	13	69	43	43	229
14	14	74	44	44	234
15	15	80	45	45	240
16	16	85	46	46	245
17	17	90	47	47	250
18	18	96	48	48	256
19	19	101	49	49	261
20	20	106	50	50	266
21	21	112	51	51	272
22	22	117	52	52	277
23	23	122	53	53	282
24	24	128	54	54	288
25	25	133	55	55	293
26	26	138	56	56	298
27	27	144	57	57	304
28	28	149	58	58	309
29	29	154	59	59	314
30	30	160	60	60	320

### III. SIMMONITE'S METHOD

This is similar to Naibod's but it uses the Sun's actual daily motion after birth and not the mean motion. The Sun's RA at noon on each day after birth must be known or calculated from the Ephemeris. If we call the Sun's RA at noon on the day of birth 0° 0', its increase at the next noon will be the measure for the first year; its motion up to noon on the second day will measure to the end of the second year; and so on.

Hence a table has to be constructed for each horoscope. Simmonite gives one for Queen Victoria's nativity, born 24<sup>th</sup> May 1819, 4.15 am, Kensington, London. The following illustrates it.

## Alan Leo Primary Directions

Year	Arc	Year	Arc
	° ' "		° ' "
1	1 1	7	7 6
2	2 2	8	8 7
3	3 3	9	9 8
4	4 3	10	10 9
5	5 4	11	11 10
6	6 5	12	12 11

Any arc of direction not exceeding 1° 1' will fall due during the first year of life; any arc between 1° 1' and 2° 2', during the second year of life; any arc between 2° 2' and 3° 3', during the third year of life; and so on. The measure for odd months is obtained by dividing the years' increase by 12. For instance if the arc of direction is 7° 23', the table shows that this would measure to age 7 years and some odd months over. The arc for 7 years exactly is 7° 6'; therefore the excess is 17'. One twelfth of the motion for the eighth year is 5'; therefore the excess measures to 3 ½ months, sufficiently near; and the whole arc measures to 7 years 3 ½ months.

A table must be constructed afresh for each horoscope, because the Sun's actual motion varies during the different months of the year.

While this method of equating arcs shows ingenuity in taking the Sun's real motion as the standard, instead of a constant like the Ptolemaic 1° or an average like the mean motion of Naibod, it is open to the criticism that it confuses Primary and Secondary directions. The arcs to be equated are Primary; but to make the Sun's motion on the first day of life the measure for the first year, its motion on the second day of life the measure for the second year, and so on, is to import the Secondary measure of a day for a year into the Primary system. It has been and still is the idea of many astrologers that Primary and Secondary directions will ultimately be found to be only two parts of one whole, and that they will be proved not to conflict as they are often supposed to do; but this method of equating is inadequate as a reconciliation and is not, we believe, followed by many workers to-day.

A more consistent method, which has been used by some students, is to employ the Sun's actual motion in RA on the day of birth as the measure of time for the whole life. This motion may vary from about 55' to 1° 5', but whatever it is on the day of birth it is used for each year throughout the whole of life. This method does not conflict with the idea that Primary directions are complete within a few hours of birth.

## Alan Leo Primary Directions

### IV. THE METHOD OF PLACIDUS

Add the arc of direction to the Sun's RA at birth. When the Sun in its daily motion after birth reaches the point of RA thus indicated, the direction will operate; the measure of time being a day for a year and two hours for a month. The RA is converted into longitude by Formula II, and the ephemeris will show when the Sun reaches this longitude.

This method has been much used by astrologers in the past. It is not very different from that of Simmonite and is open to much the same comment of looking like a half-hearted attempt to reconcile Primary and Secondary directions. Moreover, seeing that an arc of direction is really the number of degrees that pass across the meridian while the direction is in process of formation, it is not easy to see why degrees on the meridian should be added to the Sun's position in some other part of the horoscope. If the Sun were exactly on the meridian the method might perhaps apply, but it is difficult to see how it can do so when elsewhere.

### V. C.C. MASSEY'S METHOD

The following method of directing and equating was published by the well-known mystic the late C. C. Massey in *Modern Astrology*, December 1904. It is not evident why he attributes such a measure as one degree of longitude to Ptolemy. In the *Tetrabiblos*, Book III, Chap. XIV, it is stated – 'each equatorial degree being taken to signify one solar year.' This is RA, not longitude; but the method is extremely interesting and has not yet been sufficiently tested. He writes: --

(i) The presentation of Queen Victoria's horoscope in your October number induces me to send you the following correction in computing the secondary direction (considered primary by Placidus), which solves the problem of bringing 4 exactly to the meridian as the direction for accession to the throne.

The method laid down in all the books, and always followed, is to allow a *day for a year*, and proportionally for additional months and weeks. There is thus without apparent reason, a departure from the Ptolemaic measure of time in the primary direction, which

## Alan Leo Primary Directions

assigns *a degree of longitude for a year*, and so proportionally, My suggestion is: --

- (a) To apply this measure to the direction now called secondary, by addition to the Sun's longitude at birth, and
- (b) To consider the 'day = year' as determined, not by clock time but by an *equivalent* – not an equal – distance of the Sun from the meridian.

By way of illustration, and also for verification, as far as one instance can avail, let me take the direction for Queen Victoria's accession, 20/6/1837, as follows:

Neglecting seconds, the direction,  $18^{\circ} 4'$ , is from the Sun at birth, Gemini  $2^{\circ} 7'$  to Gemini  $20^{\circ} 11'$ , with RA  $79^{\circ} 19'$ , Decl.  $23^{\circ} 6'$ , Semi-Arc  $122^{\circ} 26'$ . There is a slight error in your diagram of  $12'$  in the RA of meridian, because you (with Mr. Pearce in his *Science of the Stars*) have taken the time of birth given as local time, whereas it is presumably clock or Greenwich (meant) time. A proportional deduction must therefore be made for the meridian at Kensington Palace, 51 secs. less than Greenwich. This gives  $2^{\circ} 12'$  on that meridian, with RA  $304^{\circ} 28'$ , and MD of Sun  $115^{\circ} 33'$ . Not to find the meridian at direction, bring the longitude of  $\odot$  then to the MD equivalent, by proportion of semi-arcs, to that of  $\odot$  at birth. Thus: -- *Semi-arc of rad.  $\odot$ ,  $118^{\circ} 13'$  IS TO Meridian Distance of  $\odot$  then  $115^{\circ} 33'$  AS semi-arc of  $\odot$  at direction,  $122^{\circ} 26'$ , IS TO Meridian Distance at direction,  $119^{\circ} 40'$ .*

The meridian is therefore RA of  $\odot$   $79^{\circ} 19'$  ( $439^{\circ} 19'$ ) *minus*  $119^{\circ} 40' = 319^{\circ} 39'$ , the RA of  $\odot$  at birth being  $319^{\circ} 37'$ , -- a direction obtained without any rectification of the birth-time given, and, I submit, by an entirely rational procedure.

I have tried this method with success in other cases, but I do not pretend that the result is always satisfactory. For what method of directing can that be claimed? But I hope that you or your expert readers will give it a trial.

- (ii) To the forgoing I will add another mode of directing, by

## Alan Leo Primary Directions

which the same result is obtained for the same event, in the same nativity. But a word of explanation or justification is necessary.

No one will object to the above simple direction of ☿ in the zodiac, because it merely substitutes the exact proportional advance of ☿ (or the equivalent of longitude to time observed in the primary zodiacal direction) for the diurnal advance, which does not keep that proportion. But I have now to propose a bolder innovation I do not see why any planet should not be similarly directed, regardless of its actual rate of motion. In the one case, as in the other, we have done with 'day = year' of the old secondary direction. Every degree of the zodiac represents the Sun at that point, and whatever the rate of a planet's revolution, for the purpose of directing we may equate its distance from any other zodiacal point on the degree = year principle.

It is, in short, the Sun's proportional time that determines the period represented in Astrology by zodiacal distances.

By this method of directing I do not conceive the planet as moving out of his place at birth at all, but I feign the Sun advancing from that place to the directional point and then proceed as follows, (in the case of the late Queen's accession):

The longitude of ♄ is 16 ♄ 57, to which I add 18° 4' for the age at accession, bringing the longitude to 5 ♄ 1, with RA 336° 52', Decl. 9° 40 ½', Asc. Diff. 12° 23', semi-arc diurnal 77° 37'. I now bring this longitude, 5 ♄ 1, to the meridian distance corresponding to that of ♄ at birth, which is 15° 9'.

This correspondence is obtained, of course, by proportion of the semi-arcs, thus:

Semi-arc of ♄ at birth	68° 18'
Is to MD of ♄ at birth	15° 19'
As Semi-arc of the directional longitude (5 ♄ 1)	77° 37'
Is to MD of 5 ♄ 1	17° 14'
which is MD of 5 ♄ 1 east of Meridian, therefore	
RA of 5 ♄ 1, 336° 52' - MD 17° 14' = RA of Meridian	319° 38'
RA of ♄ at birth	319° 37'

Thus by the direction of the Sun from the place of ♄, that planet is brought exactly to the Meridian, as also by the direction of the Sun from his own place, in both cases the *directional longitude* being brought to the *mundane position of the longitudes from which the direction is reckoned* – latitude being of course observed in the case of ♄ or any other planetary body.



## Alan Leo Primary Directions

The suggestions here made open up the field for a very interesting discussion. The real question at issue is much deeper than would at first sight appear, namely, 'granted that a solar longitudinal motion of  $1^\circ$  is equivalent to a year, why should it be so, seeing that the  $\odot$  does not move exactly  $1^\circ$  during either a day or any integral fraction of a year?'

In its practical aspect however the method merely calls for *testing*, and we hope all students of 'directions' will make trial of the method on any nativity of unimpeachable accuracy.

### SUMMARY OF MEASURES OF TIME

The thoughtful reader who has carefully considered the new method advanced by Mr. C. C. Massey, will perceive that there is a somewhat formidable array of rival measures of time now before the astrological world. Perhaps it will conduce to a clearer understanding of the matter if a short summary of these is given.

- A) One degree measures one year. There are two possible varieties of this, in addition to the special modifications mentioned previously: --
  - (1) In this, the degree is taken in Right Ascension. This the measure given by Ptolemy.
  - (2) In this, the degree is taken as longitude. This is Mr. C.C. Massey's suggestion.
- B) One day measures a year. There are several theoretically possible varieties of this; but it will probably be sufficient to mention the following: --
  - (3) The day is assumed to be a mean day. This is the method usually followed.
  - (4) The day is assumed to be a true solar day. This means that the progressed horoscope is calculated for *apparent* time of birth and not for the mean time. An explanation of this method is given in the manual entitled *Directions and Directing*.
  - (5) The day is assumed to be what may be called, for the sake of convenience, a mundane day; *i.e.* it ends with the Sun's return to the exact mundane position from which it started. The progressed horoscope is calculated for the time when the Sun's meridian distance is in the same proportion to its semi-arc as at birth. This is the kind of day employed by Mr. C.C. Massey [see his suggestion (b)], and it was also but forward independently in the manual *Directions and Directing*, where a practical illustration is given.

A student familiar with the mathematics of the subject might really employ any one of these as the measure in either of the two systems of directing, the application varying according to whether it was applied to the progression of the meridian or to that of the Sun. When applied to the progression of the meridian by the axial rotation of the earth, the system is called Primary; when applied to the progression of the Sun in the zodiac by the orbital revolution of the earth, the system is called Secondary.

## **Alan Leo Primary Directions**